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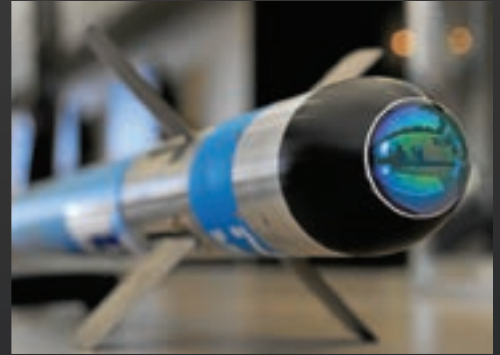
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ABOUT OUR CONTRIBUTORS

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Matthew Cameron, author of our feature article "A case for Reloading" has been a contributing author to Australian shooting magazines since 1994. His articles have also been published in New Zealand as well as in Varmint Hunter Magazine in the USA.

Matthew commenced reloading in 1980 for a .243 Winchester and he has been addicted ever since. He is a keen experimenter when it comes to reloading and is always looking for a better and more accurate load, and his rifles have never digested a factory round.

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Rob Alman, our contributor of "ADI Brass Review" began using firearms at an early age, starting off with just a small .177 air rifle and later graduating to .22 rimfire. In his early teens he was a member of a smallbore rifle club in Kalgoorlie.

Rob is an active member of Yarloop Rifle Club which has been in existence for more than 100 years. He is a regular blogger upon their website, hosting many forums and posting product reviews. His hobbies include mathematics, engineering drawing and machining and mechanics which have fed the bond with the sport he now enjoys.

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DEAR RELOADER

Welcome to the sixth edition of the ADI powders reloading guide. The new format, which will be published annually, introduces a number of changes to make the guide easier to use, as well as more interesting to browse through.



You'll notice that the guide is now in the format of a glossy magazine. This change makes it possible for us to include articles on reloading, as well as reviews of new powders and reloading kit. The addition of a modest cover price also makes it possible for us to publish the guide annually, without adding to the price of our powders.

Our reloading data is developed in cooperation with the Hodgdon Powder Company, with which we celebrate a remarkable 25-year partnership this year. Looking closer at the data, you will notice that we now supply figures for popular commercially available bullets by brand name, rather than simply by bullet weight.

This change brings our guide in step with the way Hodgdon publishes its data, and makes it easier for you to choose a powder that will give you the desired performance for your chosen bullet brand and weight.

All of our reloading information is also available on the internet at: www.adi-powders.com.au. The website is updated with new information as it becomes available, and we recommend checking it for the latest data when you are developing a new load.

We are proud to introduce Bench Mark 8208, already reverently referred to as the 'Cinderella Powder' in the US, to our range.

This powder meters with the consistency of a ball powder and drives light varmint bullets at higher velocities, while maintaining rock solid performance in varying environments. It's versatile as well, with good loads available up to the 458 Winchester Magnum. You'll find a review of Bench Mark 8208 by Ron Bryant in the pages of this guide.

On behalf of our team, thank you for using our proudly Australian-made powders. Enjoy our sport, and be safe out there. ★



Ferdi Kluever
Head of Sales
ADI Reloading Powders

BENCH MARK 8208 REVIEW ★

- Ron Bryant

For a while now I've been trying a few different reloading variations for my "fox rifle" which is a Remington 700 sps in 204 ruger cal, I have done a bit of work on the rifle, with a jewel trigger, a new stock and a magnificent Leupold 8.5 to 25 scope.

I've been getting mixed results with reloading variations but when I saw that ADI had introduced a new "Bench Mark 8208" powder I thought why not .. after all the previous Bench Mark powders used to work a treat in my old PPC.

Reading the ADI launch info it describes "Benchmark 8208" as being very stable over a range of temperatures and will maintain good consistency between lot to lot. This means that comparing loads tested in the heat of the day and actual shooting late at night especially spotlighting or working the snowline will produce similar results out of your favorite firearm.

It's a short grain powder and I've found it throws beautifully out of the powder thrower with no chopping or hang-ups especially in the small diameter neck of the 204 ruger brass.

A quick search in the web found a PDF data sheet on the ADI website that has a specific chart just for the new powder and it lists a broad range of calibers, but for the 204 with a 40gn projectile it was a start load of 26 grains. The data sheet said it should be doing 3586 fps and I found the chrony showing 3600 fps so that was a good start, but what really impressed me was with just about all variations in the load workups all five shot groups at 100m were under an inch! This was no mean feat as the wind was howling on my trial day.

I also actually got it to push a smaller projectile over the magic 4000 fps mark but having a cupboard full of 39gn sierra blitzkings that was the load I was wanting to tinker with and working around the max load of 27.3gns, I found I could drive it at a speed of 3850 fps with very little speed variation and no signs of pressure. With groups of .650 of an inch that will do just fine for me (and for the next fox) .

I then put up a 200m target with the same load and found the bullet drop to be only less than $\frac{3}{4}$ inch so I knew I was on the right track and a couple of 5 shot strings had it producing groups of just on 1 inch.

.. those foxes don't stand a chance.

As with all ADI Powders I found it to run fairly clean and the usual Hoppes/ Sweets technique made short work of it.

In terms of other components I was using Winchester brass, Fiochi primers and Sierra 39gn blitzkings and as described I got very consistent results.

The list of calibers for the powder is fairly large, but if you want to try something new, give it a run as I certainly recommend it.

If you haven't shot a 204 it's a pleasure to shoot with it's relatively mild recoil, however it hits hard, due to the speed that it's travelling and if you're reloading the vast range of the ballistic tip projectiles make short work of small game.

Look out Mr Fox here I come. ★

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A CASE FOR RELOADING ★

- Matthew Cameron

The economics of loading your own are analysed in this article. The comparisons of reloaded versus factory ammunition costs are simply a guide, as component cost can vary locally. Gunshop specials and bulk purchasing can significantly reduce component costs. Some brands of factory loaded ammunition may be twice the cost of others in the same calibre. The use of premium projectiles in factory loads can significantly increase the cost. Keep all this in mind.

If you have purchased ammunition or components recently I do not have to tell you that prices are somewhat dearer than twelve months ago.

But the steep increases do raise a query; is reloading a preferable, more practical financial proposition than factory ammunition?

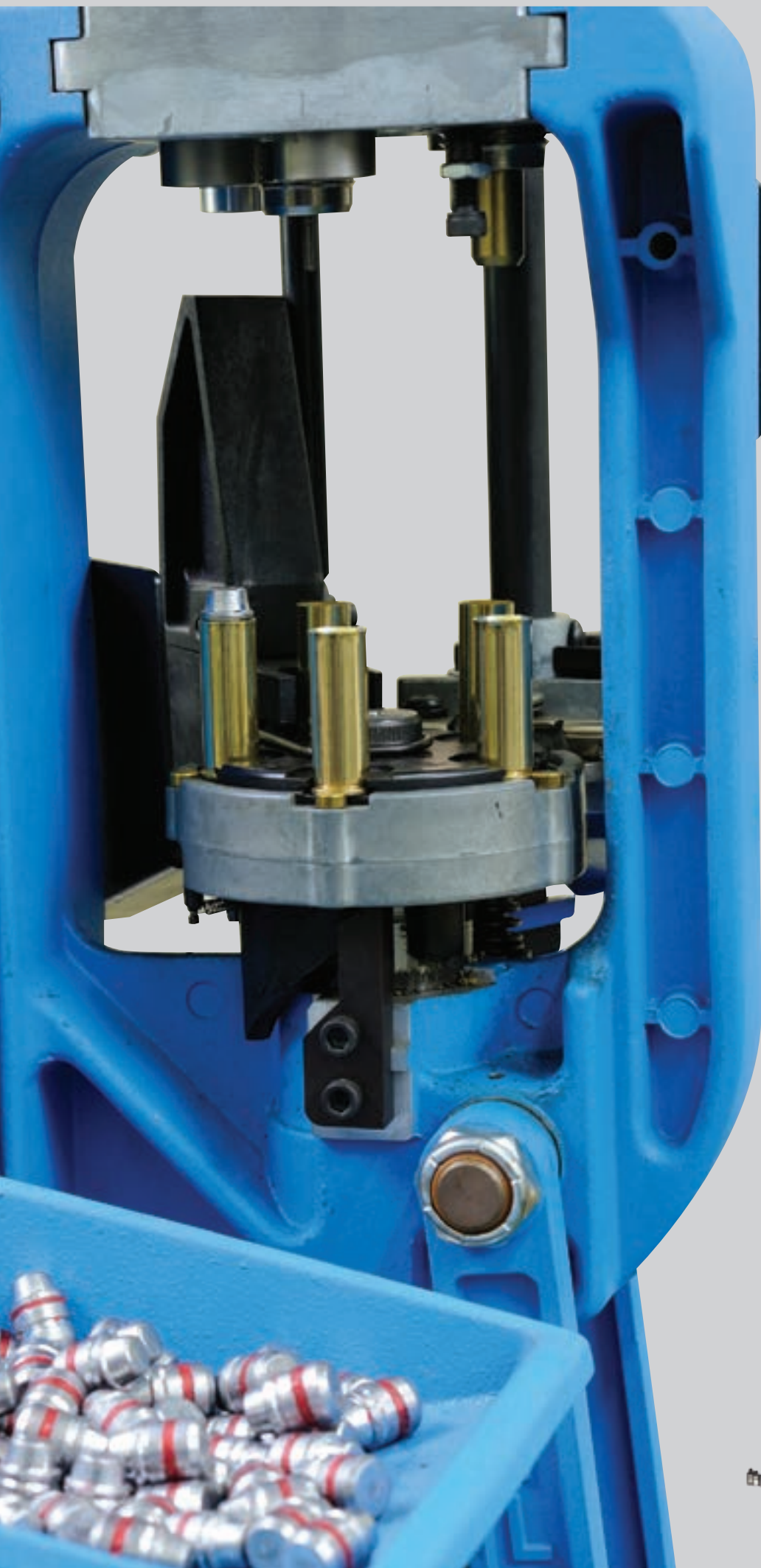
Further, is there a greater variation between the more common commercial rounds and those that are less popular? It looks a simple comparison, but I suspected that it might be a potential minefield. I was not mistaken. On one hand we have factory ammunition and on the other, brass, primers, powder and a veritable feast of projectiles that vary from the custom made to those turned out by the commercial ammunition manufacturers in their hundreds of thousands. In addition custom made projectiles vary from specialist benchrest requirements to those used by varmint and general hunters.

So the starting point has to be the commercial ammunition manufacturers. The following were selected as representative

of what is available on the Australian market: Federal, Hornady, Highland, Remington and Winchester. We aimed to obtain an average price so that we could compare with component materials available to the average reloader.

Prices were obtained out of current magazines and off various internet sites of well known firearm retailers. The type of projectile will have a great influence on the price of individual loadings. Obviously premium bullets cost more; and I have selected the more common loadings as a representative range. Generally, except where noted, premium loads were not taken into consideration. To the casual shooter or those who only fire a few rounds per annum reloading is probably not worth the outlay of equipment and time. The .204 Ruger appears to be quite popular if one believes the shooting press, 32 or 40 grain cartridges averaged \$177/100 rounds, the dearest being Remington at \$210/100 rounds, and the cheapest Hornady at \$119.00. The .223 is a popular round with varmint and vermin hunters. We concentrated on the 55 grain loading that averaged out at \$138/100. Other rounds were available in heavier loading but were not considered.





The venerable .243 Winchester was next. Most 90/100 grain loads averaged \$158 per 100. It should be noted that not all retailers carried a full range of a particular calibre. You should also consider the cost of delivery if purchased interstate, a slightly higher price locally may turn out to be the cheaper in the end result.

The longstanding and accurate 6.5 X 55 is the first metric calibre to be considered. Projectile weight was between 139 and 140 grains. Prices were very consistent and averaged out at \$133/100. Commercial ammunition for the famous 7 X 57 Mauser, similar to the 6.5 X 55 is, as one would expect, a little thin on the ground in relation to American ammunition companies. Metric calibres despite their performance have had a slow acceptance rate in the U.S.A. In this case only Federal had two offerings in 140 gn and another singular 175 gn soft point. Together with Highlands 175 soft point they averaged \$256/100.

With the .270 Winchester only the 130 grain bullet loading was considered, others in the range of 140 and 150 grain offerings were available, there was lots of competition for this cartridge. It averaged out at \$194/100. The popular .308 W similar to the 270 W had many different loads, mainly 150 grain but some 165's, once again keen competition and it averaged at \$248/100.



LEFT PAGE: Reloading tools are an essential investment and a one-off cost. Good quality loading tools last indefinitely.

RIGHT PAGE: The cases need only be purchased once. The reloader's cost is in powder, primers and projectiles.

The .375H & H is an interesting one. Any cartridge of this size is obviously aimed (pun not intended) at larger, tougher animals. Therefore, almost invariably, commercial rounds are loaded with premium projectiles. This is reflected in the higher prices. The top Federal load was \$685.00/100 loaded with a trophy bullet. Average overall was \$362/100. It is fair to say that the purchaser of factory ammunition also has the ability to reload the fired cases.

For many shooters, particularly hunters, the cases are left where they are ejected. Of the eight cartridges used only two are used enough to warrant reloading - the .243W and .270W. Now came the interesting part, how to compare the reloader's costs. The first item on the agenda was to allow for the number of times that the home reloader can use a cartridge case.

I settled on five as a reasonable number, in truth most will attain more reloads out of any particular cartridge. However when you consider that in hunting situations some brass is lost I think that five is a reasonable averaged number.

There is a wide variation in the type and amount of brass carried by various retail stores. The less popular calibres are sometimes limited to one or two makers; they may be in short supply and/or expensive. In addition to Remington and Winchester other suppliers included Nosler, Highland, P.M.C., Lapua and RWS.

The next item, primers were much easier and averaged out at \$6.00/100 for large rifle and large rifle magnum primers only. Powder also proved to be remarkably consistent. If you averaged out the price of ADI and Winchester the result was \$50 per 500 gm bottle. If you took ADI in isolation the price dropped to \$43.

For some ADI rifle powders it is possible to buy in 4 Kg bottles and the price drops to an equivalent of \$27 per 500 gm bottle.

I think that it is reasonable to assume for our purposes that most Australian reloaders use ADI powder, each 500 gm bottle of powder contains 7717 grains. The next trick is to apportion the appropriate amount of powder in relation to each particular cartridge (who said this was easy). Using the ADI Handloaders guide we will average out the maximum powder charges for each bullet weight. You can argue the methodology but I consider it reasonable.

Thus for the Ruger .204 the average top charge is 27.5 grains of powder. Dividing the contents of a 500 gram bottle (7717 grains) we will get 280 reloads per bottle at a cost of \$43. This equates to 15.4 cents per reload or \$15 per 100. The .223 uses slightly faster powders with the 55 grain projectile, the average being 24.5 grains. 7717 divided by 24.5 gives 314 reloads. This is equal to 13.8 cents per reload or \$14/100.

With the .243W we are starting to get into the heavier powder loads, the average of the 90/95/100 grains loads is 40.5 grains, this equals 190 loads per 500 gram bottle at a cost of 22.6 cents per load or \$23/100.



The 6.5 X 55 Swedish Mauser produced an average of 43.0 grains using the 140 grain load, equal to 180 reloads at a cost of \$24/100, this was more than the 7 X 57 which averaged out a little below the .243 W at 39.0 grains per load, this is equal to 198 loads from a 500 gm bottle of powder at a cost of \$22/100 reloads.

The .270 W and its 130 grain bullet produced an average powder load of 54.0 grains which equated to 140 reloads at just over 30 cents each or \$30/100, the .308W by contrast averaging out the powder loads for 150, 155 and 168 grain projectiles produced 175 reloads for 25 cents each or \$25/100. And finally the .375 H&H, its 300 grain load consuming an impressive 70.0 grains of powder for 111 reloads at a cost of 39 cents each or \$39/100.

Although we are only going to complete this exercise by considering the cost of the projectiles the so far unmentioned costs for the home reloader are those of the tools required. The most basic needs are a press and a set of dies for each calibre, perhaps we should also include all the other bits and pieces that reloaders seem to accumulate over time. Yes, you could amortize this cost over say 50 years but it really depends on the number of reloads a particular shooter will make over any time period.





Some shooters will, depending on calibre, reload for one and purchase factory ammunition for others. One father and son pair I know shoot .270 W, .30/30 W, .45/70, .308W and a 9.3 X 62 between them. They reload for all calibres except the .308 W.

On the subject of projectiles, the following companies were considered, Hornady, Nosler, Remington, Sierra and Speer. Starting with the Ruger .204 the choice was fairly limited, I could only find two lots, one from Nosler and one from Sierra, for both projectile sizes. They averaged out at \$40/100.

With the .223 and 55 grain projectiles the choice was much wider as this weight is also used in a wide variety of other calibres. There was a very large range of prices that varied from as low as \$26/100 to \$60/100 for premium projectiles for an average \$39/100.

The .243W 90-100 grain projectiles varied considerably in price depending on both the company and the retailer, possibly some stock was much older and was not reflecting the current higher prices, overall they averaged out at \$55/100. With the .270 W only the 130 grain projectile was considered and this averaged out at \$80/100. With the 6.5 X 55 Swedish Mauser projectiles of any weight were not all that common and averaged \$87/100.

An exception not considered were RWS premium projectiles at an advertised \$154.00/100. In similar fashion the 7 X 57 had a variety of projectile weights and averaged \$66/100.

The two 175 grain Sierra projectiles averaged \$54/100. As expected the range of projectiles for the .308W was the greatest number researched, not surprising when you considered the popularity of both the .308 W and the .30/06 Springfield. Cost averaged out at \$58/100. The range of projectiles in 300 gn for the .375 H & H tended to be the more expensive trophy type, a good idea when confronting any animal that may want to alter your appearance. The dearest was the RWS FMJ at \$236/100 with the mean average \$166/100.

When perusing the above figures remember the cost of brass per 100 allows for a minimum of five time use. The 6.5 X 55 is in fact the only factory load (in one brand) that is cheaper than reloading. The main reason for this is that the only factory ammunition I could find was Highland.

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NEW

Most American companies load this round but it was simply not available when researching this article. It is a reasonably popular round with some Military Rifle Club members. If you allow for this fact then the reloader wins every time.

Owners of older, obsolete or less popular rifles almost invariably have to reload, as factory cartridges are almost certainly not available or the cost is prohibitive. In addition, there are specialist rounds that have only a limited application such as the 6 mm PPC benchrest round. Only Lapua & Norma produce this cartridge. All of the benchrest shooters that I know hand load for a specific rifle and never interchange ammunition from one rifle to another, possibly it would not fit anyhow.

I must stress yet again that it is possible to cut reloading costs even further by purchasing in bulk and keeping an eye on sales that appear in magazines and on the internet. It also depends on the game you seek. In many cases the use of a trophy bullet could reasonably be considered an unnecessary expense and the end result may do no better than a cheaper soft point.

Another consideration is that the ammunition companies spend a considerable amount on developing, advertising, promotion and packaging of their products. In addition the amount of ammunition produced in Australia is insignificant and thus there are importing transport costs. Winchester Australia only produces military and domestic .223 loads. In the end the home reloader has the ability to tailor a round that is specific to his needs, whatever they may be. Personal satisfaction in producing such ammunition will always overcome the time element involved.★

The following chart shows a summary of the average cost per hundred compared to factory ammunition.

	Brass	Primer	Powder	Bullet	Total	Factory Ammo
Ruger 204	\$16	\$6	\$15	\$40	\$77	\$177
.223	\$13	\$6	\$14	\$39	\$72	\$138
.243 W	\$20	\$6	\$23	\$55	\$104	\$158
6.5 X 55	\$25	\$6	\$24	\$65	\$81	\$133
7 X 57 Mauser	\$53	\$6	\$22	\$65	\$146	\$256
.270 W	\$19	\$6	\$30	\$65	\$120	\$193
.308 W	\$19	\$6	\$25	\$55	\$108	\$248
.375 H & H	\$80	\$6	\$39	\$120	\$245	\$380





ADI BRASS REVIEW ★

- Rob Alman

I first began shooting 5.56mm with 62gn projectiles over ADI brass and soon moved to 69 grainers whilst still remaining faithful to the same ADI brass. The changeover to Sierra's 80gn pill came with many changes and thankfully ADI were now producing a new batch of brass more in tune with the modern requirements of accuracy aficionados.



Current Choices Available - .223 Rem and 50 Cal.

My aim here is not to write another one of those articles where I tell you how to handload but simply to provide a comparison between new ADI brass straight out of the packet to the same brass after case prep during the course of being fired four times.

ADI was kind enough to supply me with 300 cases to carry out this review.

The first thing to notice is ADI's tougher plastic bag that would ensure shells get to you in a better state than that of many other brands should they be subject to rough handling.

The next thing to notice is the visible annealing on the cases. This has been done very evenly and gives piece of mind that a professional job has been done in the preparation of delivering a reliable product. Some other manufacturers polish their cases to remove this.

Note: This factory annealing should normally not need to be repeated throughout the useful life of the brass and doing so should only be carried out by the most experienced handloaders. It is extremely difficult to monitor and apply evenly the heat required without rendering the brass "Dangerous."

Weighing of new unused brass before any preparation alone may not give much useful information nor improve accuracy but it is my intention to show just what is achieved by creating uniformed brass ready for match use. It is my expectation that the extreme spread will be reduced and create batches with less deviation in weight.

ADI brass has an ES of 1.5gn straight off the shelf, which alone puts it streets ahead of many other brands I have tried.

Interesting though is that ADI's average weight of 96.79gn is heavier than most other .223R brass. This didn't limit me in the amount of powder I could load and some of this weight could also be attributed to the smaller amount of material removed to accommodate the improvement of the small flash hole.

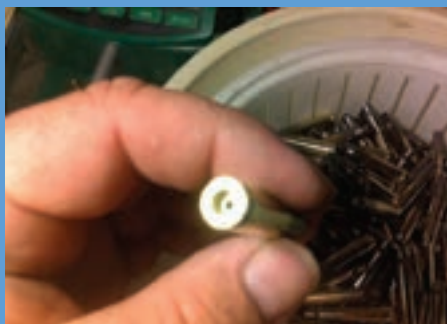
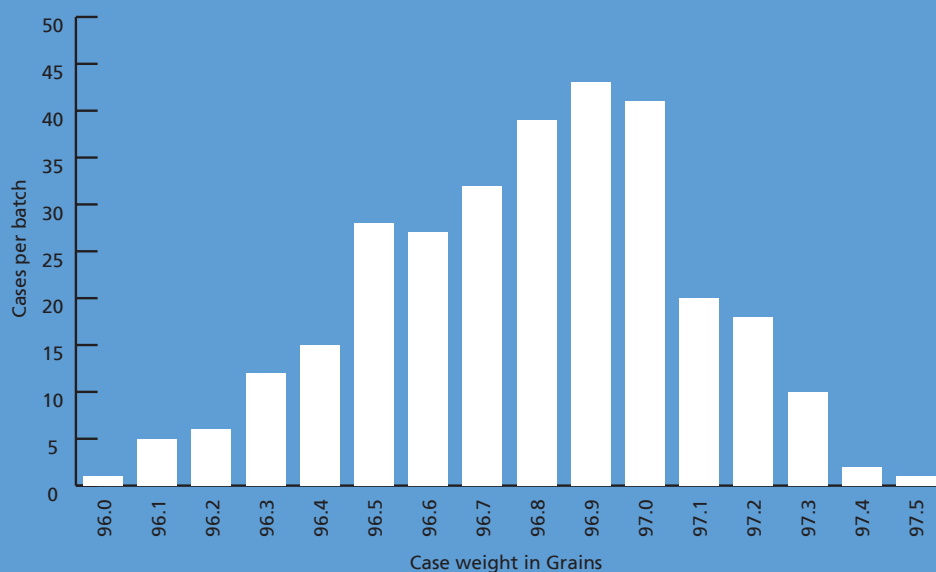
From the figures in the chart (right) we see a median weight, for new ADI brass, at just under 97gn's and also a good number of cases within that median weight.

We can deduce from this that the ADI cases will maintain an average weight heavier than that of many of the other commonly used cases and if this characteristic carries through to the match prep brass then a smaller case capacity may result.

Now to start case prep - the first stage will be to run all 300 through my Redding F/L Sizing die.

Note, that at this stage, I should remind you that the ADI has a very modern 70 thou flash hole.

New ADI brass

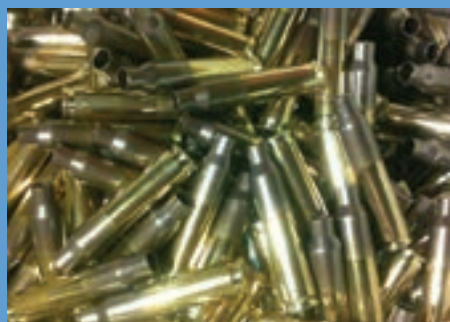


With F/L sizing completed it's off to my Lyman tumbler for a light clean and polish.

Some de-capping pins will not fit these smaller holes and either a smaller pin will need to be sourced or removed for first sizing to enable you to get started.

I am not about to list the dies that will suit but my Redding pin at 0.0625" was a goer without modification.

It will probably take a few firings for the annealing marks to disappear but this will in no way play a role in accuracy.



Straight from packet.



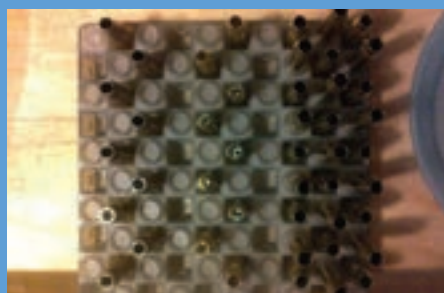
After tumbling.



Now to create a uniform length case.



Note that the ADI cases have been trimmed to the same length. Trimmed length = 1.749" or 44.425mm



ADI (left), Another brand with large flash hole (middle) & my reloads for weekend (right)



Test ammo ready for the range.



RCBS 3 Way cutter

With the RCBS 3 Way cutter installed it is a breeze to trim and chamfer whilst reproducing consistent results for each case. After a clean with some compressed air and another visual inspection it was time to remove any internal flash hole burs.

I didn't have a tool that would fit the small flash hole and couldn't wait for the one to arrive that I ordered (the Redding one for .22), so off to the shed to make one. Modification to a No1 centre drill and a little bit of stainless rod coupled with a depth stop from another tool and I was ready. I soon discovered I had wasted my time because not one flash hole needed de-burring.

This ADI stuff is really shaping up and I can't wait to get some down range.

Initial case prep removed a total of 52.6gn of brass and has reduced the ES of ADI cases to 1.2gn.



Base to ogive measurement.

The average weight of the ADI brass decreased by 0.18gn to 96.61 gn... (These results will be revisited once cases are fired and further case prep carried out).

To work up a load that suits I will start with light loads and run them across my chronograph. The first thing to do is find a weight shell and decide on that for the strings.

To maintain a control I will start with a clean barrel then fire 4 fouling shots followed by a string of 9 ADI loaded from 24.6 through 25.4 of AR2208.

In addition to this I have batched my 80gn Sierra's by weight (0.1gn ES over 500...I love Sierra!) and then by base to ogive (just 2 thou over same 500)...That's near enough for me.

I should also note that none of these loads are compressed. This may be partly because of a long throat/freebore in my rifle of 0.100 and in no way am I suggesting that these loads will be safe in any other combination. If in doubt, start loads much lighter.

Load	Velocity	mm from centre
24.6	2914	-22.7
24.7	2954	19.4
24.8	2941	18.3
24.9	2967	15.1
25	3004	11.4
25.1	2981	4.7
25.2	2982	14.6
25.3	2986	19.8
25.4	3000	28.8

Av = 2970 ES = 89.71 SD = 29.05

Fouling Shot Velocities	mm from centre
2938	21.3
3006	12.9
3026	14.9
3011	16.7

The first thing I noted was the low reading for the first fouling shot of the group, and is one of the reasons to include such shots prior to testing. This however did not detract from 8.4mm vertical dispersion at 300m. or an average of 1/6th MOA.

Secondary to this was the fact that the ADI velocities started high and finished high even with the load variations. Add to this just 2/3rd MOA vertical over the entire 9 shots.

I picked the 25.3gn load @ 2986 fps and loaded 24 rounds and fired them from 800m and was extremely impressed with the results. Apart from requiring three sighters they all went in the middle with a 50% V-Bull count and a daily score of 99.10.

More testing...

After removing a massive 225gn of material by neck turning, primer pocket uniforming and again trimming to length, the ADI brass ES reduced by a further 0.1gn but the effect of this was that each 0.1gn group now has larger workable amount of brass.

The average weight again decreased 0.11gn to 96.5gn which is now close to a full 0.3gn from new.

Unfortunately, I have not found any other brass that closely resembles such characteristics as well as maintaining a price per unit that makes it affordable for hunters and target shooters alike.

NOTE: An ultrasonic cleaner is used to clean brass inside and out to eliminate discrepancies from contaminate residues from firing.

The number of batches continues to decrease which in turn provides a larger number of useful cases per batch.

NAME	S	1	2	3	4	5	6	7	8	9	10	O/R	HCP	TDT
	4	5	5	V	4	V	4	4	4	4	/	44 ²		
	4	5	V	5	5	V	V	5	4	5	V	/	49 ⁵	
	5	V	4	4	5	V	3	4	4	V	/	/	44 ³	
	4	5	5	V	V	V	5	5	V	5	5	/	50 ⁴	
	4	V	5	5	V	4	5	5	V	4	5	/	48 ³	
	3	4	V	4	5	5	5	V	5	5	4	V	48 ⁵	
	4	5	V	V	V	5	V	5	5	V	V	/	50 ⁵	
ROB ALMAN	4	V	5	5	V	V	V	V	V	V	V	*	50 ⁵	ADY 223
	5	X	X	X	6	X	X	X	X	X	/			

SOME OTHER SCORES HAVE BEEN... 50.8 @ 500M - BODDINGTON
50.6 @ 600M - COOLWIP
50.6 @ 700M - YARLOOP
50.7 @ 800M - YARLOOP

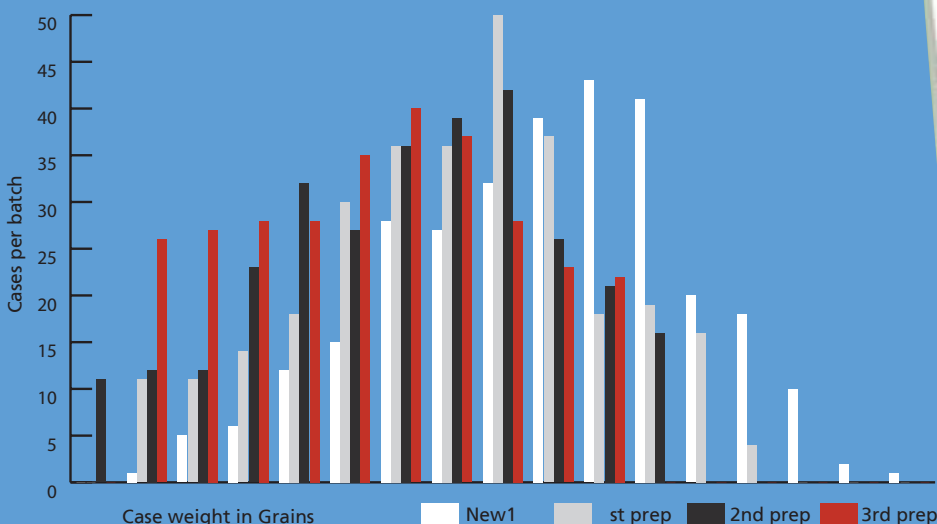
600y at Bindoon Rifle Club, 50.8... I really am looking forward to using this brass after firing & full match prep.

With the ES now down to 1.0 sorting into two or three batches will be sufficient for the life of the brass and whilst I do believe the ES may reduce even further following additional firings, there's enough evidence of the new ADI Brass quality that it will remain my choice of brass for now.

Actual removal of material (brass) appears to have levelled out somewhat with just 0.054gn average taken from each case bringing the average weight of each case to a shade over 96.44gn.

An overall comparison of the various stages of preparation is more indicative than any words. ★

ADI brass preparation comparison



TOOLS USED:

FORSTER TRIMMER WITH NECK TURNING ATTACHMENT.

K & M PRIMER POCKET UNIFORMER SET TO 0.122 (FACTORY)

THIS MEASUREMENT MAY DIFFER FROM OTHER SETUPS AND IT WOULD BE ADVISABLE TO TAKE YOUR OWN SET OF MEASUREMENTS BUT WAS SUITABLE FOR USE WITH THE CCI-BR4 PRIMERS I USED.

RCBS TRIM PRO POWER CASE TRIMMER WITH 3-WAY CUTTER.

LYMAN 1200 TUMBLER.

REDDING DELUXE FL SIZING DIE.

FORSTER ULTRA SEATING DIE.

LYMAN PRESS.



OUTBACK AMMUNITION REVIEW

- Breil Jackson

Newly released from ADI is their line of Outback ammunition. It is currently available in two calibres - .223 and .308, in a range of different loadings. The ammunition is loaded at their Benalla facility, on fully refurbished and modernised equipment. The packaging is striking, with an inland Australian red dirt scene, a couple of kangaroos and a windmill. Of course, no Australian outback scene would be quite complete without including the Southern Cross.



The cartridges are in the better class of ammunition as evidenced by the fact they are loaded with Sierra or Swift bullets, including Sierra MatchKing and Swift Scirocco bullets. Sent for testing were loads in .223 Remington - 55gr Sierra BlitzKing and 69gr Sierra Hollowpoint MatchKing and .308 Winchester - 165gr Sierra Soft Point Boattail GameKing, 168gr Sierra Hollowpoint Boattail MatchKing and a 150gr Swift Scirocco II BTS.

The headstamp is marked ADI and the cases are manufactured in Australia, from imported brass cups. Both cases are fully reloadable with no problems extracting the primers or reseating new ones. In fact, on that front, I reloaded a couple of .223 cases ten times, as fast as I could shoot and load them, and they showed no sign of neck splitting or

rupturing, and the primer pockets were still tight after ten reloads of 26 grains of AR2206H and a 55gr bullet. This is the maximum listing for a .223 with that bullet in the ADI handbook. I also sectioned a .308 case to observe how heavy the brass was.

It was slightly heavier than a commercial Winchester case in terms of thickness and head construction. Weighing half a dozen or so cases revealed them to be about 14 grains heavier than the Winchester, with about a half grain of variation case to case.

The great claim about this new Outback ammunition is what it says on the box - "extreme performance whatever the weather". This all boils down to the propellant used in the ammunition which is claimed to be extremely stable under varying temperature conditions, from +125°F (53°C) to 5°F (-20°C). In fact, the velocity is supposed to be only minimally changed regardless of the ammunition temperature within those parameters listed, so that you will get more consistent trajectory over the longer ranges.





Internally the ammunition is packaged in two plastic holders, each holding ten rounds.

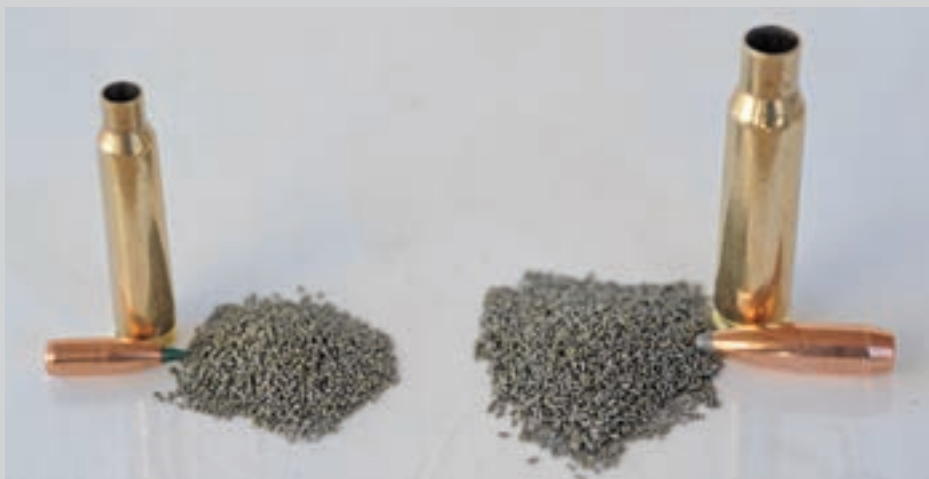
Powders from ADI have for a long time been some of the most temperature stable available anywhere. This stems back to work done after the Vietnam war, where they had problems with 5.56 ammunition running high pressure when it got hot. They have been working on it since then and refining the process to the point where now they are getting the propellants so good that they hardly vary over a 60-70°C temperature range. I have been told that the new Benchmark powder is one of the better examples of the more temperature stable propellants they have produced, and this propellant is in the .223 Outback loads. However, the .308 loads have an entirely new propellant available only at this time in the Outback ammo. It is this propellant that exhibits the best temperature stability ADI has yet produced.

This temperature stability is being called Ballistic Temperature Independence (BTI).

On the back of the box, it says that BTI ammunition will hold a 1-inch high and 1-inch low trajectory variation out to 600 yards, due to highly consistent muzzle velocity from 125°F to 5°F, whereas they are suggesting, again on the box, that competitive ammunition without BTI would be 7-inches high at 600 yards at 125°F and 11-inches low at 5°F. You'll have to forgive me on the Fahrenheit readings, because that is what is on the box. It is obviously angled at the American market, particularly with the Whitetail deer on the back of the package. But that is the claim.

A claim like that needs to be tested. I set up my range and ran a target out to a measured 600 yards. I tuned up my old ballistic temperature oven that I bought

off a ballisticsian years ago. We set up a deep freeze with freezer blocks, and set up the chronograph and waited for a dead calm day. Shooting at 600 yards has a lot of variables, so we had to try and do as much shooting as possible to get averages, and we were not so worried about horizontal dispersion, due to wind. In a .308, which was the primary focus of the 600 yard shooting, the time in flight is considerable, so the potential for wind drift is always there. Bear in mind too, that I only had a couple of packets of each type of ammunition, so I concentrated on the 168gr Sierra Hollowpoint MatchKing for the 600 yard testing, as it proved to be highly accurate. This would make the test a lot simpler, keeping all the bullets on the target.





Setting up the temperature control in the oven. The oven has its own temperature control, but I put a second thermometer in there to make sure we were around that 125°F for testing. We left them in there for an hour at this temperature to make sure everything was stabilised.



For testing I used a standard heavy barrel Sako 75 factory rifle with a 3.5-10x Leupold scope. This rifle features a set trigger and will happily put five shots into half an inch with its favoured ammunition consistently. A typical 5-shot group at 100 yards with this ammo was going about 0.85". A quick look at the Sierra ballistic table out to 600 yards showed we needed to be around 15" high at 100 yards for a dead on 600 yard zero at the published muzzle velocity of around 2800fps as specified on the packet.

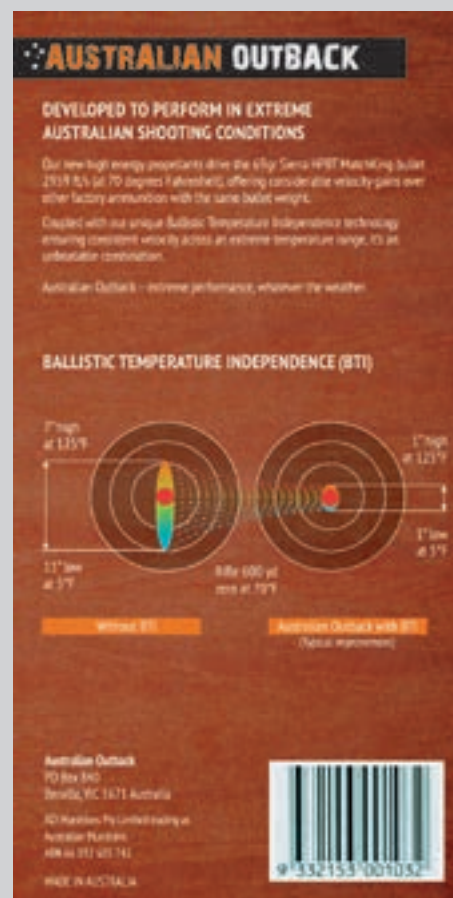
We started shooting with the ammunition at room temperature. The ambient temperature on the day was about 26°C. Doing velocity testing we found the velocity average to be 2746fps, which is about 45fps lower than the factory specified figure, but still near enough. Obviously, a test gun in test conditions may well produce the 2790fps and some other rifles with different chambering and barrel specifications may well produce the stated velocity. That is really not of significance, in any case my chronograph is set up almost 2 metres from the muzzle, and measures over a 72" span.

Then came the interesting part. We set the ballistic oven at 53°C which

is roughly 125°F, and the average of six shots was 2750fps, or 4fps more than the standard temperature. The cartridges felt quite hot to touch. Then at -15°C, which is as cold as I could get them, the performance of 6 shots was 2732fps, or 14fps lower than the standard temperature reading. That means we have an almost 70°C temperature variation producing 14fps velocity variation. Now that is staggering. I will get to what happened at the 600 yard target in a moment.

In years past, I have had boxes of factory ammo sitting on the dash of a vehicle on a hot day pop primers when fired and lock the bolt closed. Variation due to propellant temperature is real. When reloading in winter we often have to be mindful of maximums, because a safe maximum in winter may be too hot in summer.

Just for comparison, we also subjected some Highland SX ammunition to the same testing, mainly because it is factory loaded with the 168gr Sierra MatchKing bullet. For simplicity's sake, getting all the bullets on the target when you are shooting the same weight and the same projectile, should be a lot easier at 600 yards. The SX is better than average bread and butter factory ammunition also, so it is a good comparison.

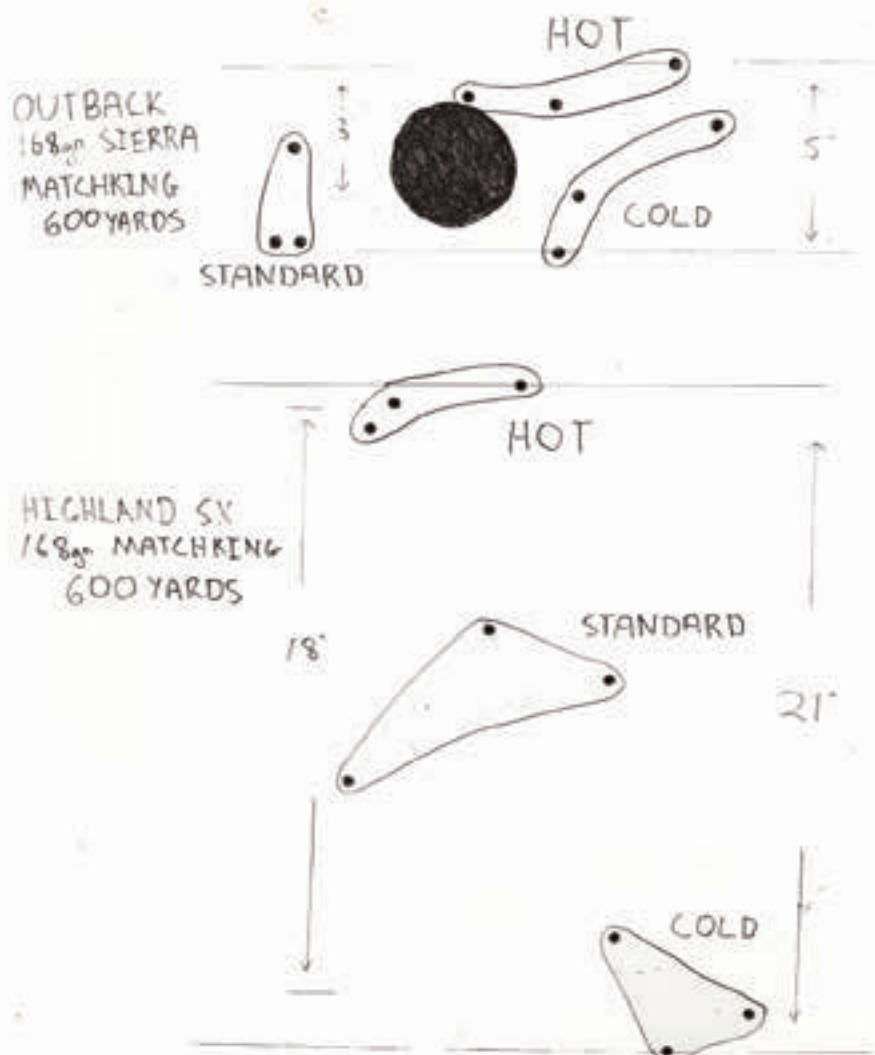


The back of the package shows ADI Outback ammunition's claim of temperature stability. On my testing, at least with the .308 ammo, I think their claim is pretty accurate.

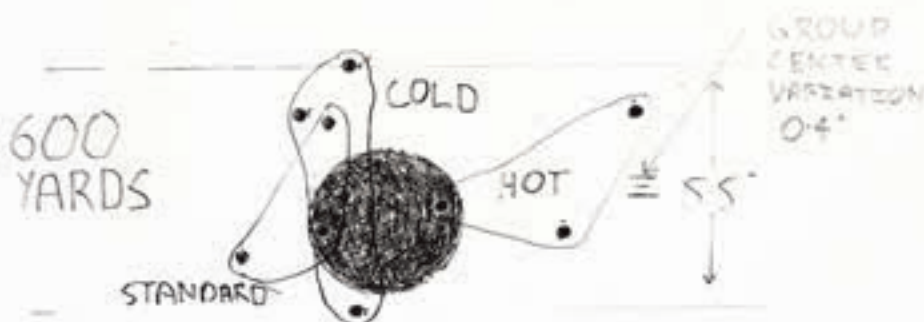
However, to my knowledge, the Highland round has no Ballistic Temperature Independence powder in its loading. It has a slightly lower velocity of average 2589fps, so it was always a little lower on the target at 600 yards, which was probably helpful to view the results. At 53°C, it was 2636fps, that is +47fps above ambient, and at -15°C it was -69fps with a figure of 2520fps. That is 116fps variation over the same 70°C temperature range. However, it is on the 600 yard target where you really see the difference.

First up, I must tell you I am no benchrest shooter, and I have never been. I am not brilliant at doping the wind because I have never had a huge amount of experience at it, not at 600 yards, anyway. Our first few standard groups measured around 4" at 600 yards. We then shot the hot and the cold groups, and the extreme vertical spread from outside bullet to outside bullet was 5.5", at 600 yards. I paid no attention to horizontal dispersion because at 600 yards in a .308, as previously explained, field conditions cannot be controlled and you really can't use it as a basis for testing equipment. We are interested in velocity and vertical performance in this test and little else.

Interestingly, the extreme spread was all covered with the cold group, so the standard and the hot bullets, all landed within the cold group extreme height variation. The most interesting thing was that, at 5.5", we are still inside the vital zone of just about any animal you would care to hunt. That is not accounting for doping of the wind, and I certainly don't recommend that people shoot animals at 600 yards. This is a ballistic test on a target only. If you average the centre of each group (hot, cold, ambient) and compare the variation between them, it was a staggering 0.4" at 600 yards. This means the average vertical movement in the three groups sizes over the nine shots was less than 0.5".



Testing comparison of Outback Ammunition with Highland SX – both loads shooting exactly the same bullet – a 168gr SX MatchKing at 600 yards, using the same aiming point. This is a graphic illustration of the temperature stability of the Outback ammo. Note how the hot, cold and standard temperature loads with the Outback all fell within a 5" band. If you average the centre of each group, you will find they have all landed within a 3" band which is actually, in this example, more than I got with other groups shot at the same distance with the same ammo. Note the Highland SX ammo, without a BTI propellant varies in extreme range 21". Even the group centres are varying some 18" from hot, cold and standard temperature.



A replicated test at 600 yards with the 168gr MatchKing load – this time all the bullets landed within a 5.5" vertical band at 600 yards with the actual groups centres between hot, cold and standard varying less than 0.5". This is truly amazing temperature stability.



Top left: 100 metre groups with .308 Winchester ammunition supplied. Five shots for the MatchKing, three for the Swift and GameKing – these were typical of the results achieved at these distances.

Top right: The groups with .223 ammo at 100 yards. The bottom left group with the 69gr MatchKings needs a tighter twist rifle than I had, as they didn't shoot particularly well. The centre group with the 55gr BlitzKing measures about 0.65" the other groups with the same ammo up the top are hot and cold groups. The bottom right hand corner is nine shots of Winchester Supreme with a standard, hot and cold temperature all at 100 yards for comparison.

With this in mind, I decided to replicate the test. This time we got more horizontal dispersion and again a 5" extreme height variation, with the average height change of the three group centres being 1.4" at 600 yards. Finally, we thought we would try it one more time to confirm the results. I also shot the Highland MatchKing at 600 yards and put them on the target. The extreme variation with the third group was again 5", and the average of the three groups centre to centre was a neat 3". Interestingly, the Highland ammunition's extreme variation was 21", remembering that the Outback ammo with the same bullet was 5". The centre to centre group extreme variation with SX, was 18", which is quite amazing. On the back of the Outback ammo box, it suggests other ammunition could be 7" high and 11" low giving an extreme variation of 18", which is about exactly where it worked out in total variation, anyway. It is a graphic illustration of the benefit of having a stable propellant under all temperature ranges.

Obviously, in your hunting career, you may take the odd long shot, but everything would have to go your way. I would suggest that 500-yards is probably getting to the outer edge of where people should ever be hunting, because of the reliability of placing the projectile, due mostly to environmental factors. Even with this Ballistic Temperature Independence, animal welfare is always an issue. A wounded animal at 600 yards is a far bigger problem to solve than it is at 100 yards. Of course for someone who shoots at long range targets, they are going to love the stability of this ammunition.

We took the ammo out hunting pigs using the Scirocco and GameKing loads. Both these bullets performed well, with Scirocco being exceptional. Deep penetration, big mushroom, and high weight retention. The core bonding of the Scirocco is superior to the unbonded GameKing, which routinely shed its core. The GameKing was more accurate however, with 3 shots into 0.7" as opposed to the Sciroccos 1.5".

When it came time to shoot the .223, we could not replicate the same temperature stability as in the .308. It uses a different propellant, even though it is quite stable, it is not to the level of the .308 load. To test the .223, we again used a heavy barreled Sako 75 – a rifle that consistently puts five shots into 0.5" at 100 yards. Testing of the .223 focused on 100 yards, and we utilised velocity measurements to test the changes. The bottom line with the .223 was we got an extreme temperature variation over the 70°C of 70fps. To put it in perspective, we tested it against some Winchester Supreme 55gr Nosler Ballistic Tip, which is a very similar bullet to the Sierra BlitzKing used in the ADI Outback ammo. The Winchester Supreme, loaded with ball powder, had an extreme variation of 127fps, which is getting up towards double that of the BTI ammunition. So the Outback .223 still exhibits the same characteristics, only not as extreme as the .308 version.

On the accuracy front, five shots into 0.6" with factory ammunition was possible, with the largest groups being around 1.3". You can see the five shot groups on the target with the hot, cold and standard temperature. I did little more than velocity test the 69 grain .223 load as a faster twist than one in 10 is required to stabilize the bullets for best accuracy.

Outback Ammunition looks to be a very good quality product, and more calibres will be added in time. Those I have heard suggested are .243, .270 and .30-06, and in time even .22-250 and .30-30. This ammunition is also being exported in a big way. With ADI's new powder manufacturing facility currently being built, you would have to believe that these outstanding quality propellants will only get better, and the extreme BTI features shown in the .308 ammunition will be replicated across the range.

If you hunt in highly variable temperature conditions, from the heat of the Australian outback in the summer, to the cold, snow and ice of the sambar hills in the winter, then check out the range of Outback ammunition that is being distributed in Australia by Winchester. It is indeed right at the forefront of the future of high performance, highly temperature stable factory ammunition. ★



Sectioning of the cases shows the ADI case in the right, slightly heavier in construction than the Winchester case on the left, about 14 grains heavier, actually. I found the cases to be solid and did a reloading torture test on the .223s – I reloaded three cases ten times without any neck splitting or rupturing, and the primer pockets after ten loads were still tight.

Outback Ammunition .308 168gr Sierra Matchking

	High	Low	Extreme Spread	Average	Variation from ambient
Factory Spec				2791fps	+45fps
Ambient Temp 26°C	2798fps	2745fps		2746fps	-----
53°C	2755fps	2743fps	3.4fps	2750fps	+4fps
-15°C	2736fps	2726fps	12.6fps	2732fps	-14fps

Highland SX 168gr Sierra Matchking

	High	Low	Extreme Spread	Average	Variation from ambient
Ambient Temp 26°C	2594fps	2586fps	7.6fps	2589fps	
53°C	2650fps	2685fps	24.3fps	2636fps	+47fps
-15°C	2533fps	2507fps	26.5fps	2520fps	-69fps

Outback Ammunition .223 55gr Sierra Blitzking

	High	Low	Extreme Spread	Average	Variation from ambient
Factory Spec				3264fps	+166fps
Ambient Temp 27°C	3112fps	3073fps	38fps	3098fps	-----
53°C	3155fps	3130fps	24fps	3140fps	+42fps
-15°C	3097fps	3046fps	51fps	3070fps	-28fps

Winchester Supreme 55gr Nosler Ballistic Silver Tip

	High	Low	Extreme Spread	Average	Variation from ambient
Factory Spec				3240fps	+98fps
Ambient Temp 26°C	3202fps	3043fps	108fps	3142fps	-----
53°C	3203fps	3170fps	33fps	3186fps	+44fps
-15°C	3098fps	3024fps	75fps	3067fps	-83fps

ADI Outback Loads

	Factory Spec	Tested
165gr GameKing .308	2840fps	2790fps
150gr Scirocco II .308	2854fps	2823fps
69gr Sierra MatchKing .223	2959fps	2801fps



Four Outback ammunition projectiles recovered from pigs. Two on the left are Swift, two on the right are Sierra GameKings. Note the high core retention of the Swift Scirocco with its bonded construction, as compared to the GameKings.



ADI POWDERS

Powder	Application
Trail boss	Rifle/Pistol
AS30N	Shotgun/Pistol
AP50N	Pistol
AS50N	Shotgun
AP70N	Shotgun/Pistol
AP100	Pistol
AR2205	Rifle/Pistol
AR2207	Rifle

Powder	Application
Bench Mark 1	Rifle
AR2219	Rifle
Bench Mark 2	Rifle
Bench Mark 8208	Rifle
AR2206H	Rifle
AR2208	Rifle
AR2209	Rifle
AR2213SC	Rifle

Powder	Application
AR2217	Rifle
AR2225	Rifle
AR2218	Rifle

BULLET GLOSSARY

Brand abbreviation	
BAR	Barnes
BEAR CRK	Bear Creek
BER	Berger
BERB	Berry's Bullets
BLX	Bull-X
BTB	Beartooth Bullets
CPB	Cast Performance
FA	Freedom Arms
HDY	Hornady
LY	Lyman SPM
MEI	Meister
NOS	Nosler
REM	Remington
SFIRE	Sinterfire
SFT	Swift
SIE	Sierra
SPR	Speer
WDLGH	Woodleigh
WIN	Winchester

Bullet abbreviation	
AB	Accu-Bond
AF/SS	A-Frame Semi-Spitzer
BK	Blitz King
BR	Bench Rest
BT	Ballistic Tip
BTSP	Boat Tail Spire Point
FMC	Full Metal Case
FMJ	Full Metal Jacket

Bullet abbreviation	
FMJBT	Full Metal Jacket Boat Tail
FN	Flat Nose
FP	Flat Point
FPJ	Full Plated Jacket
FS	Fail Safe
GC	Gas Check
GDHP	Gold Dot Hollow Point
GDSP	Gold Dot Soft Point
GS	Grand Slam
HB	Hollow Base
HC	Hollow Cavity
HP	Hollow Point
HPBT	Hollow Point Boat Tail
HSP	Hollow Soft Point
IB	Inter Bond
JFP	Jacketed Flat Point
JHC	Jacketed Hollow Cavity
JRN	Jacketed Round Nose
JSWC	Jacketed Semi-Wadcutter
LBBWC	Lead Bevel Base Wadcutter
LCN	Lead Conical Nose
LF	Lead Free
LFN	Lead Flat Nose
LFNPB	Lead Flat Nose Plain Base
LFP	Lead Flat Point
LHBWC	Lead Hollow Base Wadcutter
LRN	Lead Round Nose
LSWC	Lead Semi-Wadcutter
MK	Match King
MT-SP	Mag Tip Soft Point

Bullet abbreviation	
PART	Partition
PSPCL	Pointed Soft Point Core-Lokt
RN	Round Nose
SB	Solid Base
SBT	Spitzer Boat Tail
SCIR	Scirocco
SJ	Short Jacket
SMP	Semi-Pointed
SP	Soft Point, Spitzer, Spire Point
SPBT	Soft Point Boat Tail
SPT	Spitzer
SSP	Single Shot Pistol
SST	Super Shock Tip
ST	Silver Tip
SX	Super Explosive
TACT	Tactical
TARG	Target
TMJ	Totally Metal Jacket
TSX	Triple Shock X
VAR	Varmint
VG FB	Varmint Grenade
VLD	Very Low Drag
W/GCK	With Gas Check
WC	Wadcutter
XBT	X Boat Tail
XBTC	X Boat Tail Coated
XFB	X Flat Base
XPB	X Pistol Bullet
XTP	Extreme Terminal Performance

SHOTGUN POWDERS

AS30N



A versatile fast burning rate, low bulk density shotgun and handgun powder. It can be loaded over a broad range of handgun cartridges giving superb accuracy, weapon function and clean burning. As a shotgun powder it can be loaded into 24 gram to 28 gram loads in 12 gauge with consistency and the cleanest burning characteristics gained.

TYPICAL LOAD: 12 gauge Winchester compression formed case 70mm length

WAD	Winchester WAA1224
PRIMER	Winchester W209
SHOT WEIGHT	24 grams lead shot
CHARGE WEIGHT	18.5 grains
VELOCITY	1,300 ft/sec
PRESSURE	9,500 psi

AS50N



An effective intermediate bulk density, fast/medium burning rate shotgun powder very suitable for 28 gram loads up to 1350 ft/sec in 12 gauge.

TYPICAL LOAD: 12 gauge Winchester compression formed case 70mm length

WAD	Winchester WAA12SL
PRIMER	Winchester W209
SHOT WEIGHT	28 grams lead shot
CHARGE WEIGHT	21.5 grains
VELOCITY	1,300 ft/sec
PRESSURE	10,450 psi

AP70N



A versatile medium burning rate handgun powder and an effective slow/medium burning rate shotgun powder. It can be loaded over a broad range of handgun cartridges, from .32 to .45 calibre. As a shotgun powder it can be loaded into 32 gram to 36 gram loads in 12 gauge as well as loads in 20 and 28 gauges.

TYPICAL LOAD: 12 gauge Winchester compression formed case 70mm length

WAD	Winchester WAA12
PRIMER	Winchester W209
SHOT WEIGHT	32 grams lead shot
CHARGE WEIGHT	24.5 grains
VELOCITY	1,300 ft/sec
PRESSURE	11,200 psi



PISTOL POWDERS

AS30N



A versatile fast burning rate, low bulk density shotgun and handgun powder. It can be loaded over a broad range of handgun cartridges giving superb accuracy, weapon function and clean burning. As a shotgun powder it can be loaded into 24 gram to 28 gram loads in 12 gauge with consistency and the cleanest burning characteristics gained.

TYPICAL LOAD: .38 Special (4" vented barrel) with 148 grain cast lead projectile

CHARGE WEIGHT	2.5 grains
VELOCITY	836 ft/sec

Trail Boss



Trail Boss is designed specifically for low velocity lead bullet loads for Single Action shooting. It is based on a whole new technology that allows very high loading density, good flow through powder measures, stability in regard to temperature variation and most importantly, additional safety for the handloader.

TYPICAL LOAD: 45 Colt with 200 grain cast lead projectile

CHARGE WEIGHT	6.5 grains
VELOCITY	855 ft/sec

AP50N



An effective intermediate bulk density medium/fast burning rate handgun powder very suitable for medium target loads in .38 special. It has proven its usefulness in equipment such as 'Ammo' Load for the automated reloading of ammunition for police and paramilitary applications in this calibre. Its burning rate, bulk density and clean burning properties are similar to those of AS50N shotgun powder but it has superior metering characteristics for small charge weights.

TYPICAL LOAD: .38 Special (4" vented barrel) with 148 grain cast lead projectile

CHARGE WEIGHT	3.6 grains
VELOCITY	745 ft/sec

AP70N



A versatile medium burning rate handgun powder and an effective slow/medium burning rate shotgun powder. It can be loaded over a broad range of handgun cartridges, from .32 to .45 calibre. As a shotgun powder it can be loaded into 32 gram to 36 gram loads in 12 gauge as well as loads in 20 and 28 gauges.

TYPICAL LOAD: .44 Remington Magnum (8" barrel) with 240 grain cast lead

CHARGE WEIGHT	10 grains
VELOCITY	1,225 ft/sec

AP100



An effective single base slow burning rate handgun powder suitable for major power factor loads in .38 super and similar cartridges. It shares the same clean burning and superior metering characteristics with the other ADI handgun powders.

TYPICAL LOAD: .38 Special (4" vented barrel) with 148 grain cast lead projectile

CHARGE WEIGHT	7.5 grains
VELOCITY	1,325 ft/sec

AR2205



A very fine grained, very fast burning rifle powder suited to .22 Hornet loads but also useful in some Magnum pistol loads. Its burning rate is close to that of IMR 4227.

TYPICAL LOAD: .357 Magnum (10" barrel) with 150 grain jacketed projectile

CHARGE WEIGHT	16.5 grains
VELOCITY	1,583 ft/sec





RIFLE POWDERS

Trail Boss



Trail Boss is designed specifically for low velocity lead bullet loads for Single Action shooting. It is based on a whole new technology that allows very high loading density, good flow through powder measures, stability in regard to temperature variation and most importantly, additional safety for the handloader.

TYPICAL LOAD: 45-70 Government with 385 grain cast lead projectile

CHARGE WEIGHT	16.0 grains
VELOCITY	1,140 ft/sec

AR2205



A very fine grained, very fast burning rifle powder suited to .22 Hornet loads but also useful in some Magnum pistol loads. Its burning rate is close to that of IMR 4227.

TYPICAL LOAD: .22 Hornet with 45 grain jacketed projectile

CHARGE WEIGHT	9.8 grains
VELOCITY	2,484 ft/sec

AR2207



A very useful fine grained fast burning rifle powder for cartridges such as the .222 Remington and 7.62mm x 39 Russian. Its burning rate is close to that of IMR 4198 although it meters significantly better through standard powder loaders.

TYPICAL LOAD: .222 Remington with 50 grain jacketed projectile

CHARGE WEIGHT	20.5 grains
VELOCITY	3,160 ft/sec

Bench Mark 1



A very fine grained powder with very high bulk density and superior metering characteristics for use by bench rest shooters in cartridges such as .22 PPC. It is intermediate in burning rate between AR2207 and AR2206.

TYPICAL LOAD: .223 Remington with 55 grain jacketed projectile

CHARGE WEIGHT	22.6 grains
VELOCITY	2,995 ft/sec

AR2219

Originally developed for the Australian Defence Force 5.56mm its burning rate lies between Bench Mark 1 and Bench Mark 2. It is considered having good accuracy in small and medium capacity cartridges.

TYPICAL LOAD: 6mm PPC with 70 grain jacketed projectile

CHARGE WEIGHT	26.5 grains
VELOCITY	3,068 ft/sec

Bench Mark 2

A fine grained powder with very high bulk density and superior metering characteristics for use in national rifle association match loads such as .223 Remington with 68-69 grain projectiles. It is similar in burning rate to AR2206, but can be faster depending on the calibre used.

TYPICAL LOAD: .22-250 Remington with 52 grain jacketed projectile

CHARGE WEIGHT	34.6 grains
VELOCITY	3,755 ft/sec

Bench Mark 8208

This short grain reloading powder has acquired a deserved reputation among serious shooters for accuracy and stability over a wide temperature range. Bench Mark 8208 will maintain consistency from lot to lot, meaning that a load developed for this powder will need less tweaking.

TYPICAL LOAD: .204 Ruger

CHARGE WEIGHT	27.3 grains
VELOCITY	3755 ft/sec

AR2206

TYPICAL LOAD: .308 Winchester with 155 grain jacketed projectile

CHARGE WEIGHT	44.5 grains
VELOCITY	2,825 ft/sec



RIFLE POWDERS

AR2206H



Has a burning rate slightly slower than AR2206, but faster than AR2208. A very versatile powder in a range of calibres giving outstanding accuracy.

TYPICAL LOAD: .308 Winchester with 155 grain jacketed projectile

CHARGE WEIGHT	46 grains
VELOCITY	2,873 ft/sec

AR2208



A useful fine grained medium/slow burning rifle powder for medium sized cartridges such as .308 Winchester and 25-06. Its burning rate is close to that of IMR 4064 but its bulk density is higher.

TYPICAL LOAD: 30-30 Winchester with 150 grain jacketed projectile

CHARGE WEIGHT	34.5 grains
VELOCITY	2,349 ft/sec

AR2209



A useful fine grained, moderately slow burning rifle powder for cartridges such as 22-250, .243 Winchester, .270 Winchester, 30-06 and 300 Winchester Magnum. Its burning rate is close to that of IMR 4350 but its bulk density is a little higher and its metering through a powder loader is better.

TYPICAL LOAD: .30-06 Springfield with 165 grain jacketed projectile

CHARGE WEIGHT	59 grains
VELOCITY	2,835 ft/sec

AR2213SC



A slow burning rate rifle powder for cartridges such as .270 Winchester and 300 Winchester Magnum. AR2213SC replaced AR2213 in the Australian reloading market.

TYPICAL LOAD: .300 Winchester Magnum with 165 grain jacketed projectile

CHARGE WEIGHT	75.5 grains
VELOCITY	3,055 ft/sec

AR2217

A fine grained, very slow burning rifle powder, suited for use in most large calibre magnums.

TYPICAL LOAD: .7mm Remington Magnum with 150 grain jacketed projectile

CHARGE WEIGHT	68 grains
VELOCITY	2,936 ft/sec

AR2225

A very slow burning rate propellant optimised for the 300 Remington Ultra Magnum. It is also suitable for large capacity magnum cases and small overbore cartridges.

TYPICAL LOAD: 300 Remington Ultra Magnum with 180 grain jacketed projectile

CHARGE WEIGHT	100.5 grains
VELOCITY	3,300 ft/sec

AR2218

An extremely slow burning rifle propellant, initially developed for the Australian Defence Force 0.50 cal and is perfect for over-bore, large capacity magnums.

TYPICAL LOAD: 30-378 Weatherby with 220 grain jacketed projectile

CHARGE WEIGHT	118.5 grains
VELOCITY	3,145 ft/sec



RIFLE CASES ★

.223 Cases



Our cases have been exclusively developed for military application and are manufactured to exacting military specifications. When you use ADI's cases you will achieve optimal performance and consistency every time. Used in conjunction with ADI powders you will be taking your quality, consistency and performance to the next level.

TYPICAL LOAD: 55 grain jacketed projectile with Bench Mark 1 Propellant

.50 Cal Cases



Nothing will prepare you for the performance of our .50 calibre cases. This highly specialised military case was designed and is manufactured for ultimate performance to military specifications. When used in conjunction with ADI powders you will experience rifle shooting at the highest level. Cases will be sold in bags of 10.

TYPICAL LOAD: 655 grain jacketed projectile and AR2218 Propellant.



AUSTRALIAN OUTBACK

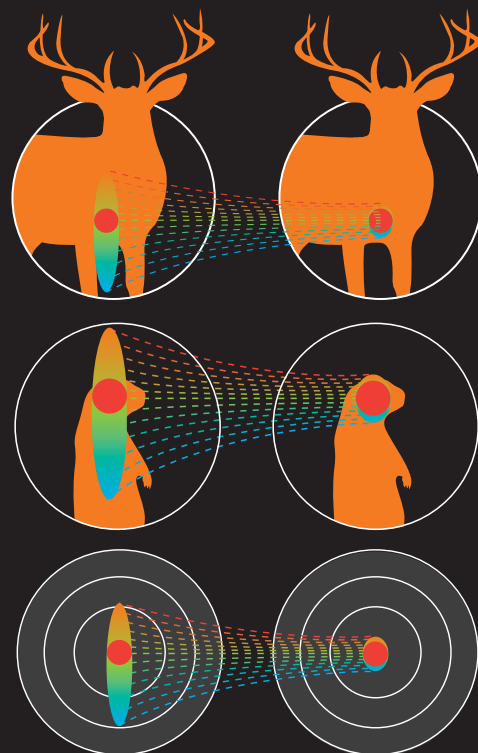
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 .223 Rem., 55gr., Sierra BlitzKing
 .223 Rem., 69gr., Sierra HPBT MatchKing

 .308 Win., 150gr., Swift Scirocco II BTS
 .308 Win., 165gr., Sierra SBT GameKing
 .308 Win., 168gr., Sierra HPBT MatchKing

www.outbackammo.com.au

RELOADING SAFETY

1. These instructions on Reloading Safety should be read in conjunction with the Warnings section.
2. Take care at all times - items and equipment used for reloading can all be dangerous if mishandled or abused.
3. Keep reloading components out of the reach of children - in particular powder, primers and lead projectiles.
4. Keep powder away from other combustible material and from possible sources of ignition.
5. Do not keep old powders, salvaged powders or powders of uncertain origins.
6. Do not smoke in areas where powder is stored or while handling powder or primers.
7. Only store powder in its original container to avoid the risk of the powder being mislabelled.
8. Do not leave any powder or primers in reloading presses or in powder/primer dispensers after handloading is completed.
9. Clean up spilled powder promptly. Use a brush and dustpan. Do not use a vacuum cleaner. Keep the waste powder under water in a suitable container until it can be disposed of safely. Do not accumulate large amounts of waste powder.
10. Each ADI Powder has specific burning rate and bulking characteristics determined by its composition, geometry and manufacturing process. The factors are carefully controlled during manufacture to ensure consistent ballistic performance. Do not attempt to mix or blend different powders as such mixtures may produce dangerous and erratic velocities and pressures.
11. Develop a strict routine for reloading operations and avoid distraction such as television, visitors etc.
12. Recheck each operation for safety and uniformity.
13. Double check critical points like powder type, projectile weight and diameter before starting.
14. Only have one powder type and one projectile type in the actual working area while reloading.
15. Do not trim cases below the minimum design length for any calibre.
16. Ensure that cases are not deformed and are free of body splits, mouth cracks, enlarged primer pockets, enlarged flash holes and any foreign matter. Only use cases which are dry (but do not dry cases by direct heating or in an oven above 150° C).
17. Check projectiles for damage and ensure that lead projectiles are free from casting defects.
18. Always wear safety glasses or goggles while reloading and wear gloves while handling lead projectiles.
19. Owing to the effect of variations within allowable manufacturing tolerances for cartridge components made by different manufacturers, weapon variations and conditions, operating temperatures etc, pressures developed by any given rifle or pistol load can vary significantly from those that apply to our recommended loads. It is therefore essential that loads be worked up from a charge weight lower than the recommended maximum, watching for any signs of excessive pressure (difficult extraction, gas leaks, flattened or blown primers, unusual recoil or expanded case heads). Loads can then be worked up to safe comfortable levels providing signs of excessive pressure are not observed. If signs of excessive pressure are noticed then loads must be reduced until they are at least 5% lower than the load at which the excessive pressure signs were first noted.
20. Take special care when working up trial loads with slow burning powders in large calibre cartridges. Light loads in some calibres may produce occasional dangerously high pressures. It is suggested that minimum loads in large calibre cartridges should not be reduced below about 75% case capacity.

RELOADING SAFETY

21. Keep detailed records of your safe loads for your weapons and consult them before reloading. However, be prepared to work them up again whenever you change the lot of powder or alter the weapon. Normally a starting reduction of 5% in charge weight is all that should be necessary when you change lots of powder.
22. Never exceed maximum recommended loads.
23. Carry out frequent check weighing of powder charges thrown either by a hand operated powder measure or reloading press to ensure the setting has not changed. At least five charges should be used for each check using a good set of powder scales.
24. Because many recommended loads (especially for pistols) do not fill the cartridge case it is essential that, prior to bullet seating, each filled case is individually inspected to ensure that it contains only a single charge. Never load a cartridge with a double charge as excessively dangerous pressures are certain to occur. After bullet seating, the cartridge overall length must be individually checked to ensure that it has not fallen below the minimum design value where excessive dangerous pressures may be experienced.
25. Ensure that all reloaded cartridges are free from oil, grease, excess lead bullet lubricant and any other foreign matter prior to firing.
26. Never attempt to decap live primers from a cartridge case. Primed cases or cartridges should always be fired in a firearm to destroy the primer. NOTE: Whenever practicable, avoid loading to maximum possible velocity. Experienced shooters know that velocities which are somewhat slower than maximum will usually give the best accuracy while helping to prolong weapon and barrel life and making shooting more comfortable.
27. Any questions or concerns related to the use of ADI Powders should be directed to:
Australian Munitions, Mulwala NSW at
reload.support@adi-powders.com.au

WARNING

1. For the safety of the purchaser and others, ADI powders must be used in accordance with the latest edition of the ADI Powders Handloaders' Guide. Overloading, incorrect storage or improper use can result in personal injury or death to the user and/or other persons as well as damage to property. It is essential that users of ADI powders:
 - Follow the recommendations of the ADI Powders Handloaders' Guide by not exceeding the maximum loads.
 - Use only the latest reloading data.
 - Keep the powders out of reach of children and those persons unfamiliar with the properties of powders.
 - Store the powders in a cool, dry and safe place with the lid tightly closed.
 - Check the powders at least once per year for any signs of deterioration as described below.
 - Store all powders in the original containers.
 - Do not smoke in areas where ADI powders are stored and used.
 - Do not have loaded firearms in areas where ADI powders are stored and used.
2. Loading data provided within the ADI Powders Handloaders' Guide has been compiled from many sources including actual ballistic testing by Australian Munitions under controlled conditions and published loading/ballistic information available in the literature. The ballistic performance of powders varies considerably depending upon factors such as the type of firearm being used and its condition, the particular components being used in a cartridge with a powder, the reloading techniques used, the actual batch of the powder being loaded, weather conditions at the time of firing, etc. Therefore, it is not possible for the loading data in the ADI Powders Handloaders' Guide (or any other similar manual) to be other than a guide to a safe load for any particular application. Exceeding the recommended loading data will increase the chance of obtaining unsafe pressures and may result in damage and/or personal injury or even death.
3. While Australian Munitions controls the burning rate of its various powders within tight limits at the time of manufacture, all other factors affecting the ballistic performance of these powders at the time of use are outside Australian Munitions's control. Australian Munitions therefore disclaims any and all warranties concerning the use of its various powders for any particular application. Australian Munitions does not assume, nor does it authorise any person to assume for it, any liability in connection with the use of any product or data.
4. The buyer of ADI Powders assumes the risk of having to follow safe loading practices otherwise damage and/or severe personal injury (including death) may occur.
5. NEVER substitute ADI Powders for black powder or Pyrodex® and NEVER mix ADI powders with these materials. NEVER use ADI powders in black powder firearms, saluting cannons or similar devices. Any of these practices may result in the firearm blowing apart resulting in property damage, personal injury or even death.
6. Store powders in a cool dry place separate from solvents, flammable gases and other combustible materials. Ensure that the storage area selected is free from any possible source of excess heat and is isolated from open flame, hot water heaters, furnaces, chimneys, flue pipes, etc. Avoid storing powders in areas which may be heated by the sun or where electrical, electronic or mechanical equipment is operated. Do not allow containers of powder to contact walls of storage areas that are exposed on the other side to sunlight or other form of heating. Any such form of heating or ignition may result in a fire, either immediately or after some time due to accelerated chemical deterioration and subsequent spontaneous ignition. An average storage temperature below 25° C is recommended to obtain a safe shelf life of at least 10 years from the date of packing. Increased storage temperature will reduce the safe shelf life significantly—by approximately one-third for every 10° C above 25° C.
7. All powders deteriorate chemically as they get older. This rate of deterioration can be accelerated by storage in warm conditions, exposure to other chemicals and exposure to direct sunlight etc. Any such deterioration may ultimately lead to a fire through spontaneous ignition of the powder. CHECK containers of smokeless powder for possible chemical deterioration through age or inadequate storage. Yearly checks are recommended. Chemical deterioration may ultimately lead to spontaneous ignition of the powder. Chemical deterioration of smokeless powder can be recognised by carefully smelling the contents of the container. Any deterioration produces an acrid, acidic odour quite different from the normal sweet smelling odours of ethanol or ether that are usually present. Rusting of metal surfaces exposed to smokeless powder can also indicate deterioration.
8. Deteriorated smokeless powder should be disposed of by carefully burning it in thin layers (not more than 10mm deep) in small quantities (never more than 500 gram) in an isolated location (at least 10 metres from any other combustible material). DO NOT LIGHT THE POWDER DIRECTLY. Always use an ignition train of slow burning combustible material so that you are able to retreat to a safe distance before the powder ignites.

WARNING

9. Store ADI Powders in their original containers, which have been approved for that purpose. Storage cabinets used for storage of containers of powders should be constructed of insulating materials with weak walls, seams or joints to provide easy venting in the event of a fire. Such storage cabinets should not be located on walls where heating on the other side (by the sun or other heating arrangement) will occur.
10. DO NOT SMOKE in areas where smokeless powder is stored or used.
11. DO NOT HAVE LOADED FIREARMS in areas where ADI Powders are stored or used—accidental or intended operation of the firearm may cause ignition of smokeless powder, either by direct ignition of powder in the open or through bullet impact on containers of powders.
12. Do not cut, pierce or puncture powder containers.
13. ADI rifle powders are designed to give less ballistic variation with temperature changes than regular powders. This does not mean that ballistics will never change with temperature. The extent to which change is minimised depends upon many factors including the calibre, primer brand and projectile weight. Care should always be taken to ensure that any particular load is safe at the extreme temperatures at which it will be used.
14. Powders can change their moisture reasonably quickly if exposed to the atmosphere. Any change of moisture can affect the powder burning rate and the effectiveness or safety of a particular load. Always minimise the exposure of any smokeless powder to the atmosphere during loading. Use minimum quantities of powder at any time in powder loaders and keep lids on containers tightly closed at all times. Do not keep powders in loaders for long periods of time. In this way you are more likely to preserve the appropriate level of moisture for the lot of the powder in use and obtain consistent reliable ballistic performances from every load.
15. Follow the hints on Reloading Safety given in the ADI Powders Reloader's Guide. Remember that powders and ammunition are explosive and that firearms are only designed to operate within safe working limits and are not indestructible. The wrong combination of powder burning rate, charge weight, cartridge components and weapon can be disastrous. ALWAYS TAKE EXTREME CAUTION when you are reloading.
16. Never mix any varieties of powder, regardless of their type, brand or source.
17. Do not salvage powder from old cartridges, and do not mix new and salvaged powder.
18. Always store powder in the smallest practical quantities. If you have large quantities of powder, do not maintain it all in one place only. Spread your containers, and remember that small containers are safer than large containers.

SHOTGUN DATA

Introduction

The shotgun data for this edition was developed through the use of pressure/proof barrels. All loads for standard cartridges adhere to the guidelines provided by the Sporting Arms and Ammunition Manufacturers Institute (SAAMI).

Loads have been listed in a convenient presentation that lists all components used for a given set of data. The data shown is to be used for lead shot only and should not be used with steel or bismuth shot. Never substitute components when loading shotshells using this data. Substitution of different components could cause excessive or unsafe pressures, which may result in damage to your firearm and/or personal injury.

Velocity

Velocity is measured electronically with the use of two magnetic sightscreens. The screens measure the time taken for the shot to pass through the screens. Screens are set at 3 feet apart with the first screen positioned 1½ feet from the muzzle.

Pressure

Pressures have been measured electronically with a transducer as pounds per square inch (psi). This method utilises a pressure transducer, which rests against the cartridge in the chamber. When the cartridge is fired, the gases cause the shotgun shell to expand against the pressure transducer.

Loading Instructions

When loading, weigh actual charges thrown by the bushing or charge bar. Bushing or charge bars do not throw the exact powder charge as listed in the tables. Charge weight variations occur because of small tolerances in bushing sizes, tolerances in bulk density of powder and the way each loader is mounted and operated. It is essential that charges being dropped are verified for safety and to ensure you are obtaining the charge weight listed.

SHOTGUN DATA

12 Gauge 2³/₄" (70mm) ACTIV Plastic Cases

24g - (7/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	19.0	6,150 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	19.0	6,150 PSI	1,200 fps	Gualandi	WIN209	30"
	20.0	6,600 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	20.0	6,600 PSI	1,250 fps	Gualandi	WIN209	30"
	20.5	7,150 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	20.5	7,150 PSI	1,300 fps	Gualandi	WIN209	30"
	21.5	7,700 PSI	1,350 fps	Gualandi	Fiocchi 616	30"
	21.5	7,700 PSI	1,350 fps	Gualandi	WIN209	30"
	22.5	8,250 PSI	1,400 fps	Gualandi	Fiocchi 616	30"
	22.5	8,250 PSI	1,400 fps	Gualandi	WIN209	30"

12 Gauge 2³/₄" (70mm) ACTIV Plastic Cases

28g - (1 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	19.0	8,100 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	19.0	8,100 PSI	1,200 fps	Gualandi	WIN209	30"
	19.8	9,000 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	19.8	9,000 PSI	1,250 fps	Gualandi	WIN209	30"
	21.0	10,200 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	21.0	10,200 PSI	1,300 fps	Gualandi	WIN209	30"
AS50N	21.0	7,050 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	21.0	7,050 PSI	1,200 fps	Gualandi	WIN209	30"
	21.6	7,850 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	21.6	7,850 PSI	1,250 fps	Gualandi	WIN209	30"
	22.6	8,700 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	22.6	8,700 PSI	1,300 fps	Gualandi	WIN209	30"

12 Gauge 2³/₄" (70mm) ACTIV Plastic Cases

32g - (1 1/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	18.7	11,250 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	18.7	11,250 PSI	1,200 fps	Gualandi	WIN209	30"
AS50N	21.0	8,550 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	21.0	8,550 PSI	1,200 fps	Gualandi	WIN209	30"
	22.0	10,450 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	22.0	10,450 PSI	1,250 fps	Gualandi	WIN209	30"
	22.6	11,350 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	22.6	11,350 PSI	1,300 fps	Gualandi	WIN209	30"
AP70N	26.0	8,800 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	26.0	8,800 PSI	1,250 fps	Gualandi	WIN209	30"
	27.0	9,850 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	27.0	9,850 PSI	1,300 fps	Gualandi	WIN209	30"

SHOTGUN DATA

12 Gauge 2¾" (70mm) ACTIV Plastic Cases

36g - (1 1/4 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	25.5	9,200 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	25.5	9,200 PSI	1,200 fps	Gualandi	WIN209	30"
	26.4	10,150 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	26.4	10,150 PSI	1,250 fps	Gualandi	WIN209	30"
	27.5	10,900 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	27.5	10,900 PSI	1,300 fps	Gualandi	WIN209	30"

12 Gauge 2¾" (70mm) Plastic Reiffenhaauser style cases (Fiocchi Cheddite)

24g - (7/8 oz) - Lee Lead Slug

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	31.3	8,435 PSI	1,550 fps	B&P H.24	Fiocchi 616	30"
	32.6	7,812 PSI	1,550 fps	WAA12SL	WIN209	30"

12 Gauge 2¾" (70mm) Plastic Reiffenhaauser style cases (Fiocchi Cheddite)

24g - (7/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	19.0	6,150 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	19.0	6,150 PSI	1,200 fps	Gualandi	WIN209	30"
	16.8	6,200 PSI	1,200 fps	WAA12SL	WIN209	30"
	20.0	6,600 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	20.0	6,600 PSI	1,250 fps	Gualandi	WIN209	30"
	18.0	7,200 PSI	1,250 fps	WAA12SL	WIN209	30"
	20.5	7,150 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	20.5	7,150 PSI	1,300 fps	Gualandi	WIN209	30"
	19.0	8,000 PSI	1,300 fps	WAA12SL	WIN209	30"
	21.5	7,700 PSI	1,350 fps	Gualandi	Fiocchi 616	30"
	21.5	7,700 PSI	1,350 fps	Gualandi	WIN209	30"
	22.5	8,250 PSI	1,400 fps	Gualandi	Fiocchi 616	30"
	22.5	8,250 PSI	1,400 fps	Gualandi	WIN209	30"

12 Gauge 2¾" (70mm) Plastic Reiffenhaauser style cases (Fiocchi Cheddite)

28g - (1 oz) - Lee Lead Slug

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	30.4	8,303 PSI	1,450 fps	B&P H.24	WIN209	30"
	30.0	8,446 PSI	1,450 fps	WAA12	WIN209	30"

SHOTGUN DATA

12 Gauge 2³/₄" (70mm) Plastic Reißenhaauser style cases (Fiocchi Cheddite)

28g - (1 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	17.1	7,800 PSI	1,180 fps	WAA12SL	WIN209	30"
	19.5	7,750 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	19.5	7,750 PSI	1,200 fps	Gualandi	WIN209	30"
	18.5	9,200 PSI	1,235 fps	WAA12SL	WIN209	30"
	20.0	8,200 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	20.0	8,200 PSI	1,250 fps	Gualandi	WIN209	30"
	19.3	10,060 PSI	1,290 fps	WAA12SL	WIN209	30"
	21.0	9,050 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	21.0	9,050 PSI	1,300 fps	Gualandi	WIN209	30"
	22.0	9,800 PSI	1,350 fps	Gualandi	Fiocchi 616	30"
	22.0	9,800 PSI	1,350 fps	Gualandi	WIN209	30"
AS50N	19.0	7,100 PSI	1,180 fps	WAA12SL	WIN209	30"
	21.5	6,600 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	21.5	6,600 PSI	1,200 fps	Gualandi	WIN209	30"
	20.0	8,600 PSI	1,235 fps	WAA12SL	WIN209	30"
	22.5	7,250 PSI	1,250 fps	Gualandi	Fiocchi 616	30"
	22.5	7,250 PSI	1,250 fps	Gualandi	WIN209	30"
	21.1	9,600 PSI	1,290 fps	WAA12SL	WIN209	30"
	23.5	8,050 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	23.5	8,050 PSI	1,300 fps	Gualandi	WIN209	30"
	24.5	9,500 PSI	1,350 fps	Gualandi	Fiocchi 616	30"
	24.5	9,500 PSI	1,350 fps	Gualandi	WIN209	30"

12 Gauge 2³/₄" (70mm) Plastic Reißenhaauser style cases (Fiocchi Cheddite)

32g - (1 1/8 oz) - Shot size 2 to BBs Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	26.5	8,096 PSI	1,300 fps	B&P H.24	Fiocchi 616	30"
	26.7	7,934 PSI	1,300 fps	WAA12	WIN209	30"
	27.8	8,898 PSI	1,350 fps	B&P H.24	Fiocchi 616	30"
	27.9	8,722 PSI	1,350 fps	WAA12	WIN209	30"
	28.4	9,299 PSI	1,375 fps	B&P H.24	Fiocchi 616	30"
	28.5	9,116 PSI	1,375 fps	WAA12	WIN209	30"

12 Gauge 2³/₄" (70mm) Plastic Reißenhaauser style cases (Fiocchi Cheddite)

32g - (1 1/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS50N	19.2	7,000 PSI	1,090 fps	WAA12	WIN209	30"
	19.7	7,400 PSI	1,145 fps	WAA12	WIN209	30"
	22.0	8,500 PSI	1,200 fps	Gualandi	Fiocchi 616	30"
	22.0	8,500 PSI	1,200 fps	Gualandi	WIN209	30"
	21.0	8,500 PSI	1,200 fps	WAA12	WIN209	30"
	22.8	9,500 PSI	1,255 fps	Gualandi	Fiocchi 616	30"
	22.8	9,500 PSI	1,255 fps	Gualandi	WIN209	30"
	23.5	11,000 PSI	1,300 fps	Gualandi	Fiocchi 616	30"
	23.5	11,000 PSI	1,300 fps	Gualandi	WIN209	30"
AP70N	23.3	9,100 PSI	1,200 fps	WAA12	WIN209	30"
	24.0	9,600 PSI	1,255 fps	WAA12	WIN209	30"
	25.0	10,800 PSI	1,310 fps	WAA12	WIN209	30"

SHOTGUN DATA

12 Gauge 2¾" (70mm) Plastic Reiffenhauser style cases (Fiocchi Cheddite)

36g - (1 1/4 oz) - Shot size 2 to BBs Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	25.8	8,626 PSI	1,250 fps	B&P H.21	Fiocchi 616	30"
	26.1	8,313 PSI	1,250 fps	WAA12F114	WIN209	30"
	26.9	9,554 PSI	1,300 fps	B&P H.21	Fiocchi 616	30"
	26.9	9,305 PSI	1,300 fps	WAA12F114	WIN209	30"
	28.0	10,482 PSI	1,350 fps	B&P H.21	Fiocchi 616	30"
	27.7	10,296 PSI	1,350 fps	WAA12F114	WIN209	30"

12 Gauge 2¾" (70mm) Plastic Reiffenhauser style cases (Fiocchi Cheddite)

36g - (1 1/4 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	24.0	10,900 PSI	1,220 fps	WAA12F114	Fiocchi 616	30"

12 Gauge 2¾" (70mm) Plastic Reiffenhauser style cases (Fiocchi Cheddite)

SG/00 - 9 Lead Balls

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS50N	22.7	7,153 PSI	1,250 fps	B&P H.21	Fiocchi 616	30"
	22.3	7,067 PSI	1,250 fps	WAA12F114	WIN209	30"
	23.9	8,243 PSI	1,300 fps	B&P H.21	Fiocchi 616	30"
	23.5	8,164 PSI	1,300 fps	WAA12F114	WIN209	30"
	25.0	9,334 PSI	1,350 fps	B&P H.21	Fiocchi 616	30"
	24.7	9,260 PSI	1,350 fps	WAA12F114	WIN209	30"
AP70N	25.8	7,931 PSI	1,300 fps	B&P H.21	Fiocchi 616	30"
	26.7	7,312 PSI	1,300 fps	WAA12F114	WIN209	30"
	27.2	8,523 PSI	1,350 fps	B&P H.21	Fiocchi 616	30"
	27.6	8,150 PSI	1,350 fps	WAA12F114	WIN209	30"
	28.5	9,115 PSI	1,400 fps	B&P H.21	Fiocchi 616	30"
	28.5	8,988 PSI	1,400 fps	WAA12F114	WIN209	30"

12 Gauge 2¾" (70mm) Winchester Compression-formed AA & HS type plastic cases

24g - (7/8 oz) - Lee Lead Slug

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	29.7	9,548 PSI	1,550 fps	WAA12SL	WIN209	30"

12 Gauge 2¾" (70mm) Winchester Compression-formed AA & HS type plastic cases

24g - (7/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	16.8	7,000 PSI	1,200 fps	WAA1224	CCI209	30"
	16.8	7,000 PSI	1,200 fps	WAA1224	Fiocchi 616	30"
	16.8	7,000 PSI	1,200 fps	WAA1224	WIN209	30"
	17.5	8,350 PSI	1,255 fps	WAA1224	CCI209	30"
	17.5	8,350 PSI	1,255 fps	WAA1224	Fiocchi 616	30"
	17.5	8,350 PSI	1,255 fps	WAA1224	WIN209	30"
	18.5	9,500 PSI	1,300 fps	WAA1224	CCI209	30"
	18.5	9,500 PSI	1,300 fps	WAA1224	Fiocchi 616	30"
	18.5	9,500 PSI	1,300 fps	WAA1224	WIN209	30"
	19.2	10,600 PSI	1,350 fps	WAA1224	CCI209	30"
	19.2	10,600 PSI	1,350 fps	WAA1224	Fiocchi 616	30"
	19.2	10,600 PSI	1,350 fps	WAA1224	WIN209	30"

SHOTGUN DATA

12 Gauge 2³/₄" (70mm) Winchester Compression-formed AA & HS type plastic cases

24g - (7/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
	19.2	10,600 PSI	1,350 fps	WAA1224	WIN209	30"
AS50N	21.0	7,800 PSI	1,300 fps	WAA1224	CCI209	30"
	21.0	7,800 PSI	1,300 fps	WAA1224	Fiocchi 616	30"
	21.0	7,800 PSI	1,300 fps	WAA1224	WIN209	30"
	22.0	8,300 PSI	1,350 fps	WAA1224	CCI209	30"
	22.0	8,300 PSI	1,350 fps	WAA1224	Fiocchi 616	30"
	22.0	8,300 PSI	1,350 fps	WAA1224	WIN209	30"

12 Gauge 2³/₄" (70mm) Winchester Compression-formed AA & HS type plastic cases

28g - (1 oz) - Lee Lead Slug

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	28.1	9,984 PSI	1,450 fps	WAA12	WIN209	30"

12 Gauge 2³/₄" (70mm) Winchester Compression-formed AA & HS type plastic cases

28g - (1 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	17.0	8,450 PSI	1,180 fps	WAA12SL	CCI209	30"
	17.0	8,450 PSI	1,180 fps	WAA12SL	Fiocchi 616	30"
	17.0	8,450 PSI	1,180 fps	WAA12SL	WIN209	30"
	18.5	9,750 PSI	1,250 fps	WAA12SL	CCI209	30"
	18.5	9,750 PSI	1,250 fps	WAA12SL	Fiocchi 616	30"
	18.5	9,750 PSI	1,250 fps	WAA12SL	WIN209	30"
	19.5	11,000 PSI	1,300 fps	WAA12SL	CCI209	30"
	19.5	11,000 PSI	1,300 fps	WAA12SL	Fiocchi 616	30"
	19.5	11,000 PSI	1,300 fps	WAA12SL	WIN209	30"
AS50N	19.5	8,000 PSI	1,180 fps	WAA12SL	CCI209	30"
	19.5	8,000 PSI	1,180 fps	WAA12SL	Fiocchi 616	30"
	19.5	8,000 PSI	1,180 fps	WAA12SL	WIN209	30"
	20.4	9,200 PSI	1,250 fps	WAA12SL	CCI209	30"
	20.4	9,200 PSI	1,250 fps	WAA12SL	Fiocchi 616	30"
	20.4	9,200 PSI	1,250 fps	WAA12SL	WIN209	30"
	21.5	10,450 PSI	1,300 fps	WAA12SL	CCI209	30"
	21.5	10,450 PSI	1,300 fps	WAA12SL	Fiocchi 616	30"
	21.5	10,450 PSI	1,300 fps	WAA12SL	WIN209	30"
	22.5	11,250 PSI	1,350 fps	WAA12SL	CCI209	30"
	22.5	11,250 PSI	1,350 fps	WAA12SL	Fiocchi 616	30"
	22.5	11,250 PSI	1,350 fps	WAA12SL	WIN209	30"

SHOTGUN DATA

12 Gauge 2¾" (70mm) Winchester Compression-formed AA & HS type plastic cases

32g - (1 1/8 oz) - Shot size 2 to BBs Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	24.1	8,403 PSI	1,250 fps	WAA12	WIN209	30"
	25.0	9,411 PSI	1,300 fps	WAA12	WIN209	30"
	25.9	10,418 PSI	1,350 fps	WAA12	WIN209	30"
	26.4	10,922 PSI	1,375 fps	WAA12	WIN209	30"

12 Gauge 2¾" (70mm) Winchester Compression-formed AA & HS type plastic cases

32g - (1 1/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS30N	16.3	7,500 PSI	1,090 fps	WAA12	CCI209	30"
	16.3	7,500 PSI	1,090 fps	WAA12	Fiocchi 616	30"
	16.3	7,500 PSI	1,090 fps	WAA12	WIN209	30"
	17.0	10,000 PSI	1,145 fps	WAA12	CCI209	30"
	17.0	10,000 PSI	1,145 fps	WAA12	Fiocchi 616	30"
	17.0	10,000 PSI	1,145 fps	WAA12	WIN209	30"
AS50N	19.0	9,000 PSI	1,145 fps	WAA12	CCI209	30"
	19.0	9,000 PSI	1,145 fps	WAA12	Fiocchi 616	30"
	19.0	9,000 PSI	1,145 fps	WAA12	WIN209	30"
	19.5	9,850 PSI	1,200 fps	WAA12	CCI209	30"
	19.5	9,850 PSI	1,200 fps	WAA12	Fiocchi 616	30"
	19.5	9,850 PSI	1,200 fps	WAA12	WIN209	30"
AP70N	23.0	9,750 PSI	1,200 fps	WAA12	CCI209	30"
	23.0	9,750 PSI	1,200 fps	WAA12	Fiocchi 616	30"
	23.0	9,750 PSI	1,200 fps	WAA12	WIN209	30"
	23.5	10,100 PSI	1,250 fps	WAA12	CCI209	30"
	23.5	10,100 PSI	1,250 fps	WAA12	Fiocchi 616	30"
	23.5	10,100 PSI	1,250 fps	WAA12	WIN209	30"
	24.5	11,200 PSI	1,300 fps	WAA12	CCI209	30"
	24.5	11,200 PSI	1,300 fps	WAA12	Fiocchi 616	30"
	24.5	11,200 PSI	1,300 fps	WAA12	WIN209	30"

12 Gauge 2¾" (70mm) Winchester Compression-formed AA & HS type plastic cases

36g - (1 1/4 oz) - Shot size 2 to BBs Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	23.8	10,365 PSI	1,250 fps	WAA12F114	WIN209	30"
	24.9	11,358 PSI	1,300 fps	WAA12F114	WIN209	30"

12 Gauge 2¾" (70mm) Winchester Compression-formed AA & HS type plastic cases

36g - (1 1/4 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	22.5	11,400 PSI	1,220 fps	WAA12F114	CCI209	30"
	23.0	10,900 PSI	1,220 fps	WAA12F114	WIN209	30"

SHOTGUN DATA

12 Gauge 2¾" (70mm) Winchester Compression-formed AA & HS type plastic cases

SG/00 - 9 Lead Balls

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AS50N	21.1	8,963 PSI	1,250 fps	WAA12F114	WIN209	30"
	22.3	10,023 PSI	1,300 fps	WAA12F114	WIN209	30"
	23.5	11,084 PSI	1,350 fps	WAA12F114	WIN209	30"
AP70N	24.9	8,646 PSI	1,300 fps	WAA12F114	WIN209	30"
	25.8	9,498 PSI	1,350 fps	WAA12F114	WIN209	30"
	26.7	10,350 PSI	1,400 fps	WAA12F114	WIN209	30"

16 Gauge 2¾" (70mm) Winchester AA Plastic Compression-Formed Cases

28g - (1 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	19.0	9,200 PSI	1,165 fps	WAA16	WIN209	30"
	20.0	10,300 PSI	1,220 fps	WAA16	WIN209	30"
	20.7	11,000 PSI	1,275 fps	WAA16	WIN209	30"

20 Gauge 2¾" (70mm) ACTIV Plastic Cases

24g - (7/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	18.5	8,300 PSI	1,200 fps	WAA20	WIN209	30"

20 Gauge 2¾" (70mm) ACTIV Plastic Cases

28g - (1 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	18.5	8,700 PSI	1,165 fps	WAA20F1	CCI209	30"
	19.0	9,600 PSI	1,220 fps	WAA20F1	CCI209	30"

20 Gauge 2¾" (70mm) Winchester AA Plastic Compression-Formed Cases

22g - (3/4 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	15.0	8,700 PSI	1,180 fps	WAA20	CCI209	30"
	15.0	8,700 PSI	1,180 fps	WAA20	WIN209	30"
	16.0	9,820 PSI	1,245 fps	WAA20	CCI209	30"
	16.0	9,820 PSI	1,245 fps	WAA20	WIN209	30"
	17.0	11,050 PSI	1,320 fps	WAA20	CCI209	30"
	17.0	11,050 PSI	1,320 fps	WAA20	WIN209	30"

20 Gauge 2¾" (70mm) Winchester AA Plastic Compression-Formed Cases

24g - (7/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	15.0	10,100 PSI	1,125 fps	WAA20	CCI209	30"
	15.0	10,100 PSI	1,125 fps	WAA20	WIN209	30"
	15.5	10,700 PSI	1,160 fps	WAA20	CCI209	30"
	15.5	10,700 PSI	1,160 fps	WAA20	WIN209	30"
	16.0	11,400 PSI	1,200 fps	WAA20	CCI209	30"
	16.0	11,400 PSI	1,200 fps	WAA20	WIN209	30"

SHOTGUN DATA

20 Gauge 3" (75mm) Remington Premier Plastic Cases

32g - (1 1/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	17	10,070 PSI	1,075 fps	Rem. SP 20	WIN209	30"
	18	11,990 PSI	1,135 fps	Rem. SP 20	WIN209	30"

20 Gauge 3" (75mm) Winchester AA Plastic Compression-Formed Cases

32g - (1 1/8 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	16	11,130 PSI	1,070 fps	Rem. SP 20	WIN209	30"
	16.5	11,980 PSI	1,105 fps	Rem. SP 20	WIN209	30"

28 Gauge 2¾" (70mm) Winchester AA Plastic Compression-Formed Cases

22g - (3/4 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AP70N	13.0	10,800 PSI	1,200 fps	WWAA28	WIN209	30"

410 Bore 2½" Winchester AA Plastic Compression-Formed Cases

14g - (1/2 oz) - Shot size 3 to 12 Lead

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type	Barrel length
AR2205	14.0	10,500 PSI	1,200 fps	WWAA41	CCI209M	28"
	14.0	10,500 PSI	1,200 fps	WWAA41	WIN209	28"

SHOTGUN POWDER BUSHING CHART AS30N

CHARGE WEIGHT (grains)	LEE	PONSNESS WARREN	BLAIR	MEC	LYMAN	REDDING	DL-155 DL-155APF DL-105	PACIFIC DL-266	DL-366	GT, FW, LT A, AP, D, DP	TEXAN M	HORNADY
16.0	.141	H		29								429
16.5	.148	F1				12	414	420	420	124	126	
	.155	I	429	30	H10	13						
17.0	.163	J		31						125	127	441
17.5		J1	441		H11		423	432	432		128	
18.0		J2		32		14				127	129	456
18.5	.171	G	450				432	441	441	128		
		G1		33							130	
19.0	.180				H11A		444	450	450	1129	131	468
			449	34	H12							
19.5		M	465							130	132	
20.0	.189			35			453	459	462	131		483
20.5		N		36	H13	15				132		
21.0		O		37								495
21.5		P										
22.0	.198	Q		38								507
22.5				38A								
23.0												
23.5												

NOTE:

This bushing chart does not represent recommended charge weights. It is intended only as a guide to the approximate weight of powder which will be dropped by the listed bushing. It is essential that charges being dropped are weighed on each occasion a loading machine is used.

SHOTGUN POWDER BUSHING CHART AS50N

CHARGE WEIGHT (grains)	LEE	PONSNESSE WARREN	BLAIR	MEC	LYMAN	REDDING	DL-155 DL-155APF DL-105	PACIFIC DL-266	DL-366	GT, FW, LT A, AP, D, DP	TEXAN M	HORNADY
13.7	.105			21								
14.0												375
14.3				22								378
14.6												381
												384
14.9				23								387
												390
15.2	.116	D										393
15.5		D1		24								396
16.0	.122	E		25								402
16.5	.128	E1		26								408
				27								414
17.0		E2										
17.5	.134	F1		28								420
18.0				29								423
18.5	.141	H				12				124		429
19.0		I	429	30	H10	13	414	420	420	125	126	435
19.5	.148	J		31							127	441
20.0		J1	441		H11		423	423	432	126	128	447
20.5	.155	K	450	32		14				127		453
							432	441	441		129	
21.0				33						128	130	459
21.5	.163	L			H11A					129		465
			459		H12		444	450	450		131	
22.0				34						130		471
22.5	.171	M	465								132	477
23.0				35			453	459	462	131	133	483
23.5	.180	N		36		15	462	479	474	132		489
24.0		O			H13							495
24.5	.189	P		37								501
25.0		Q		38								507
25.5												
26.0	.198			38A								

NOTE:

This bushing chart does not represent recommended charge weights. It is intended only as a guide to the approximate weight of powder which will be dropped by the listed bushing. It is essential that charges being dropped are weighed on each occasion a loading machine is used.

SHOTGUN POWDER BUSHING CHART AP70N

CHARGE WEIGHT (grains)	LEE	PONSNES WARREN	BLAIR	MEC	LYMAN	REDDING	DL-155 DL-155APF DL-105	PACIFIC DL-266	DL-366	GT, FW, LT A, AP, D, DP	TEXAN M	HORNADY
12.7		C									112	
13.0		C		16								330
13.5				17							113	
13.6										111		
14.0		D1		18						112	114	342
14.5				19							115	
15.0											116	354
15.5	.095	E		20						113	117	
16.0				21						114		366
		E1		22						115		
16.5										116	118	372
	.105											
17.0		E2		22							119	378
		D								117		
17.4				23								384
	.110	D1								118	120	
18.0		F									121	390
18.5	.116	F1		24								393
19.0		F6		25						119	122	402
19.4	.122		26							120	123	405
20.0	.123	G		27						121	124	411
20.6		G1								122		417
21.0	.134			28						123		420
21.5							423	420	420		126	423
22.0		H		29		12				124	127	429
22.5	.141			30			432	432	432		128	432
23.0		I	429			13				125		438
23.5	.148			31	H10					126		441
						14				127		
24.0	.151	J	441		H11		447	447	447		129	447
24.5	.155	J1		32							130	450
25.0		K					456	456	456	128	131	456
	.163	L	450	33						129		
26.0			459	34			468	468	468		132	468
				35						130	133	
27.0	.171	M	465				480	480	480	131		480
28.0		N		36		15				132		489
29.0		O		37	H13					133		501

NOTE:

This bushing chart does not represent recommended charge weights. It is intended only as a guide to the approximate weight of powder which will be dropped by the listed bushing. It is essential that charges being dropped are weighed on each occasion a loading machine is used.

PISTOL

17 Bumble Bee				Case: Winchester (reformed) Twist: 1:10" Primer: Federal 200			Barrel length: 10" Trim length: 0.910"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
25 GR. HDY HP	AR2205	.172"	1.290"	6.0	2,033 fps	-	7.0	2,331 fps	-
22 Hornet				Case: Winchester Twist: 1:16" Primer: Winchester SR			Barrel length: 15" Trim length: 1.393"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. HDY V-MAX	AR2205	.224"	1.725"	10.5	2,579 fps	35,600 CUP	11.6C	2,770 fps	42,500 CUP
40 GR. SPR SP	AR2205	.224"	1.725"	9.0	2,403 fps	39,900 CUP	10.2	2,458 fps	43,000 CUP
45 GR. BAR XBT	AR2205	.224"	1.850"	8.5	2,189 fps	37,000 CUP	9.8	2,339 fps	42,700 CUP
	AR2207	.224"	1.850"	10.5	2,010 fps	31,500 CUP	11.5C	2,261 fps	36,900 CUP
45 GR. HDY SP	AR2205	.224"	1.750"	8.5	2,202 fps	39,900 CUP	9.8	2,349 fps	42,000 CUP
	AR2207	.224"	1.750"	10.5	2,002 fps	28,000 CUP	11.5C	2,200 fps	32,000 CUP
50 GR. SIE SP	AR2205	.224"	1.850"	8.4	2,120 fps	39,700 CUP	9.4	2,270 fps	41,800 CUP
	AR2207	.224"	1.850"	10.5	2,007 fps	28,200 CUP	11.5C	2,203 fps	34,100 CUP
53 GR. BAR XFB	AR2205	.224"	1.850"	8.0	1,943 fps	37,600 CUP	8.7	2,068 fps	43,000 CUP
	AR2207	.224"	1.850"	10.0	1,859 fps	31,600 CUP	11.0	2,098 fps	40,600 CUP
55 GR. HDY SP	AR2205	.224"	1.850"	8.0	1,987 fps	41,800 CUP	9.0	2,151 fps	43,000 CUP
	AR2207	.224"	1.850"	10.0	1,846 fps	30,000 CUP	11.5	2,182 fps	41,000 CUP
22 Remington Jet Magnum				Case: Twist: - Primer:			Barrel length: 10" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR.	AP100	-	-	-	-	-	8.0	1,800 fps	-
40 GR. *	AR2205	-	-	-	-	-	13.5	2,290 fps	32,900 CUP
45 GR.	AP100	-	-	-	-	-	7.5	1,700 fps	-
	AR2205	-	-	-	-	-	12.5	2,300 fps	-
* 8 3/8" Barrel									
22 K Hornet				Case: Winchester Twist: 1:14" Primer: Winchester SR			Barrel length: 15" Trim length: 1.393"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. HDY V-MAX	AR2205	.224"	1.725"	11.0	2,747 fps	39,500 CUP	12.3	2,924 fps	46,000 CUP
40 GR. NOS BT	AR2205	.224"	1.900"	11.0	2,644 fps	37,500 CUP	12.2C	2,822 fps	45,500 CUP
45 GR. BAR XBT	AR2205	.224"	1.850"	10.5	2,502 fps	40,900 CUP	11.3	2,619 fps	45,300 CUP
45 GR. SPR SP	AR2205	.224"	1.750"	10.7	2,520 fps	40,700 CUP	11.7	2,669 fps	45,500 CUP
50 GR. SIE BK	AR2205	.224"	1.900"	10.0	2,375 fps	40,200 CUP	11.0	2,520 fps	45,700 CUP
	AR2207	.224"	1.900"	11.5	2,201 fps	30,100 CUP	12.5C	2,386 fps	38,700 CUP
53 GR. BAR XFB	AR2205	.224"	1.850"	9.5	2,240 fps	39,000 CUP	10.5	2,357 fps	45,900 CUP
	AR2207	.224"	1.850"	11.5	2,153 fps	30,200 CUP	12.5C	2,335 fps	42,600 CUP
55 GR. HDY SP	AR2205	.224"	1.850"	10.0	2,313 fps	43,400 CUP	11.0	2,443 fps	46,100 CUP

PISTOL

22 K Hornet				Case: Winchester Twist: 1:14" Primer: Winchester SR			Barrel length: 15" Trim length: 1.393"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2207	.224"	1.850"	11.5	2,167 fps	31,100 CUP	12.5C	2,352 fps	39,400 CUP
221 Remington Fireball				Case: Remington Twist: 1:12" Primer: Remington 7 1/2			Barrel length: 10.75" Trim length: 1.390"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR. SPR SP	AR2205	.224"	1.830"	15.5	2,925 fps	-	17.0	3,033 fps	-
45 GR. HDY SP	AR2205	.224"	1.840"	15.0	2,592 fps	-	16.0	2,697 fps	-
	AR2207	.224"	1.840"	16.0	2,451 fps	-	17.0	2,632 fps	-
50 GR. NOS BT	AR2205	.224"	1.850"	15.0	2,582 fps	-	16.0	2,672 fps	-
	AR2207	.224"	1.850"	15.5	2,412 fps	-	16.5	2,539 fps	-
53 GR. SIE HPBT	AR2205	.224"	1.840"	15.0	2,449 fps	-	16.0	2,603 fps	-
	AR2207	.224"	1.840"	15.5	2,343 fps	-	16.5	2,537 fps	-
55 GR. SPR SP	AR2205	.224"	1.830"	14.5	2,418 fps	-	15.5	2,503 fps	-
	AR2207	.224"	1.830"	15.0	2,261 fps	-	16.0	2,441 fps	-
60 GR. HDY SP	AR2205	.224"	1.840"	14.0	2,328 fps	-	15.0	2,414 fps	-
	AR2207	.224"	1.840"	15.0	2,251 fps	-	16.0	2,399 fps	-
222 Remington				Case: Twist: - Primer:			Barrel length: 10" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
45 GR. SIE SP	AR2207	-	-	-	-	-	20.5	2,575 fps	-
50 GR. REM PSP	AR2207	-	-	-	-	-	20.0	2,525 fps	-
52 GR. SIE HPBT	AR2207	-	-	-	-	-	19.6	2,425 fps	-
55 GR. SPR FMJ	AR2207	-	-	-	-	-	19.2	2,325 fps	-
223 Remington (5.56 x 45mm)				Case: Winchester Twist: 1:12" Primer: Winchester SR			Barrel length: 15" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
36 GR. BAR VG FB	Bench Mark 8208	.224"	2.200"	25.4	2,829 fps	44,500 PSI	27.0C	3,057 fps	50,600 PSI
40 GR. NOS BT	AR2207	.224"	2.280"	20.5	2,755 fps	29,400 CUP	22.5	3,014 fps	49,600 CUP
	AR2219	.224"	2.280"	23.5	2,783 fps	34,600 CUP	25.5	3,087 fps	48,000 CUP
	Bench Mark 2	.224"	2.280"	25.3	2,900 fps	39,600 CUP	27.3	3,174 fps	51,000 CUP
	Bench Mark 8208	.224"	2.280"	25.0	2,755 fps	41,500 PSI	26.7C	2,985 fps	50,400 PSI
	AR2206H	.224"	2.280"	25.0	2,628 fps	32,100 CUP	27.5C	3,060 fps	44,500 CUP
	AR2208	.224"	2.280"	25.0	2,609 fps	34,400 CUP	28.0C	3,069 fps	47,200 CUP
45 GR. SIE SP	AR2207	.224"	2.240"	20.0	2,617 fps	28,800 CUP	22.0	2,847 fps	49,100 CUP
	AR2219	.224"	2.240"	23.0	2,635 fps	36,000 CUP	25.0	2,926 fps	47,400 CUP
	Bench Mark 2	.224"	2.240"	25.3	2,815 fps	41,400 CUP	27.3	3,089 fps	51,100 CUP
	Bench Mark 8208	.224"	2.240"	24.5	2,617 fps	41,700 PSI	26.8	3,022 fps	52,000 PSI
	AR2206H	.224"	2.240"	25.0	2,603 fps	33,800 CUP	27.5C	3,017 fps	43,400 CUP

PISTOL

223 Remington (5.56 x 45mm)				Case: Winchester Twist: 1:12" Primer: Winchester SR			Barrel length: 15" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
50 GR. SPR SP	AR2208	.224"	2.240"	25.0	2,550 fps	30,200 CUP	28.0C	3,010 fps	43,700 CUP
	AR2207	.224"	2.210"	19.5	2,429 fps	32,400 CUP	21.5	2,824 fps	45,900 CUP
	AR2219	.224"	2.210"	22.0	2,460 fps	36,500 CUP	24.0	2,740 fps	49,300 CUP
	Bench Mark 2	.224"	2.210"	24.0	2,639 fps	38,600 CUP	26.5	2,953 fps	50,400 CUP
	Bench Mark 8208	.224"	2.210"	23.5	2,525 fps	40,500 PSI	25.8	2,849 fps	53,300 PSI
	AR2206H	.224"	2.210"	25.0	2,658 fps	38,300 CUP	27.5C	3,024 fps	51,300 CUP
53 GR. SIE HP	AR2208	.224"	2.210"	26.5	2,842 fps	40,800 CUP	27.5C	2,959 fps	44,800 CUP
	AR2207	.224"	2.200"	19.5	2,650 fps	34,200 CUP	21.5	2,846 fps	46,700 CUP
	AR2219	.224"	2.200"	21.5	2,527 fps	39,200 CUP	23.5	2,707 fps	48,900 CUP
	Bench Mark 2	.224"	2.200"	24.0	2,652 fps	39,900 CUP	26.0	2,932 fps	49,800 CUP
	Bench Mark 8208	.224"	2.200"	23.0	2,382 fps	41,400 PSI	25.4	2,789 fps	53,400 PSI
	AR2206H	.224"	2.200"	25.0	2,660 fps	37,400 CUP	27.0C	2,965 fps	48,600 CUP
55 GR. SPR SP	AR2208	.224"	2.200"	24.0	2,449 fps	38,400 CUP	27.0C	2,833 fps	47,900 CUP
	AR2207	.224"	2.200"	19.0	2,400 fps	34,800 CUP	21.0	2,719 fps	47,600 CUP
	AR2219	.224"	2.200"	21.0	2,439 fps	38,600 CUP	23.0	2,638 fps	48,900 CUP
	Bench Mark 2	.224"	2.200"	24.0	2,625 fps	42,600 CUP	25.6	2,840 fps	50,000 CUP
	Bench Mark 8208	.224"	2.200"	23.0	2,390 fps	42,100 PSI	25.3	2,715 fps	53,100 PSI
	AR2206H	.224"	2.200"	25.0	2,721 fps	39,700 CUP	26.0	2,880 fps	49,000 CUP
60 GR. HDY V-MAX	AR2208	.224"	2.200"	25.5	2,697 fps	41,300 CUP	27.5C	2,972 fps	49,700 CUP
	AR2207	.224"	2.250"	18.0	2,450 fps	42,500 CUP	20.0	2,647 fps	47,600 CUP
	AR2219	.224"	2.250"	22.0	2,526 fps	40,300 CUP	23.5	2,657 fps	49,800 CUP
	Bench Mark 2	.224"	2.250"	23.0	2,515 fps	42,500 CUP	24.6	2,744 fps	49,900 CUP
	Bench Mark 8208	.224"	2.250"	21.5	2,179 fps	43,500 PSI	23.6	2,488 fps	51,700 PSI
	AR2206H	.224"	2.250"	24.0	2,514 fps	37,600 CUP	26.0C	2,804 fps	50,100 CUP
63 GR. SIE SP	AR2208	.224"	2.250"	25.0	2,544 fps	40,400 CUP	27.0C	2,825 fps	51,900 CUP
	AR2207	.224"	2.200"	18.0	2,294 fps	33,600 CUP	20.0	2,572 fps	44,600 CUP
	AR2219	.224"	2.200"	20.0	2,240 fps	38,100 CUP	22.0	2,482 fps	48,400 CUP
	Bench Mark 2	.224"	2.200"	22.0	2,318 fps	41,800 CUP	24.2	2,601 fps	50,500 CUP
	Bench Mark 8208	.224"	2.200"	21.0	2,158 fps	43,000 PSI	23.1	2,409 fps	52,400 PSI
	AR2206H	.224"	2.200"	23.5	2,434 fps	43,300 CUP	25.5	2,800 fps	50,000 CUP
69 GR. SIE HPBT	AR2208	.224"	2.200"	24.5	2,566 fps	42,400 CUP	26.4	2,809 fps	50,700 CUP
70 GR. SPR SP	Bench Mark 8208	.224"	2.140"	20.0	2,051 fps	44,100 PSI	21.8	2,201 fps	52,800 PSI
22 BR Remington				Case: Remington (reformed) Twist: 1:14" Primer: Remington 7 1/2			Barrel length: 15" Trim length: 1.510"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR. NOS BT	AR2207	.224"	2.090"	25.5	3,145 fps	43,200 CUP	27.6	3,394 fps	50,400 CUP
	AR2219	.224"	2.090"	28.0	3,002 fps	38,000 CUP	30.0	3,245 fps	49,000 CUP
	Bench Mark 2	.224"	2.090"	30.0	3,248 fps	41,400 CUP	32.0	3,485 fps	49,200 CUP
	AR2206H	.224"	2.090"	31.0	3,152 fps	38,300 CUP	32.8	3,320 fps	46,400 CUP
	AR2208	.224"	2.090"	33.5	3,101 fps	36,500 CUP	31.5	3,285 fps	43,500 CUP
45 GR. SPR SP	AR2219	.224"	1.945"	29.0	3,130 fps	41,000 CUP	31.5	3,446 fps	49,400 CUP
	Bench Mark 2	.224"	1.945"	29.5	3,106 fps	41,100 CUP	31.6	3,412 fps	48,900 CUP

C = Compressed Load: L = Lead Projectile

PISTOL

22 BR Remington				Case: Remington (reformed) Twist: 1:14" Primer: Remington 7 1/2			Barrel length: 15" Trim length: 1.510"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.224"	1.945"	30.0	2,980 fps	41,600 CUP	32.5	3,334 fps	49,000 CUP
	AR2208	.224"	1.945"	31.5	3,005 fps	36,800 CUP	33.5	3,246 fps	43,600 CUP
50 GR. SPR SP	AR2219	.224"	1.945"	28.0	3,036 fps	37,000 CUP	30.5	3,289 fps	50,000 CUP
	Bench Mark 2	.224"	1.945"	29.5	3,113 fps	40,400 CUP	31.5	3,377 fps	49,700 CUP
	AR2206H	.224"	1.945"	29.5	2,957 fps	41,200 CUP	32.0	3,229 fps	48,000 CUP
	AR2208	.224"	1.945"	31.5	3,040 fps	38,900 CUP	33.5	3,248 fps	44,600 CUP
53 GR. HDY HP	AR2219	.224"	2.065"	28.0	3,070 fps	38,000 CUP	30.0	3,281 fps	48,400 CUP
	Bench Mark 2	.224"	2.065"	28.5	3,075 fps	41,200 CUP	30.5	3,272 fps	49,200 CUP
	AR2206H	.224"	2.065"	29.5	3,034 fps	41,900 CUP	31.5	3,233 fps	49,000 CUP
	AR2208	.224"	2.065"	31.0	3,050 fps	43,400 CUP	33.0	3,224 fps	51,500 CUP
55 GR. SPR SP	AR2219	.224"	2.050"	28.0	3,125 fps	40,000 CUP	30.0	3,277 fps	48,400 CUP
	Bench Mark 2	.224"	2.050"	28.5	3,062 fps	41,600 CUP	30.5	3,276 fps	49,600 CUP
	AR2206H	.224"	2.050"	29.0	3,015 fps	37,100 CUP	31.0	3,214 fps	49,400 CUP
	AR2208	.224"	2.050"	30.0	3,030 fps	41,600 CUP	32.5	3,203 fps	49,300 CUP
63 GR. SIE SP	AR2219	.224"	2.015"	24.0	2,699 fps	40,800 CUP	26.5	2,909 fps	48,800 CUP
	Bench Mark 2	.224"	2.015"	27.0	2,901 fps	42,000 CUP	29.0	3,074 fps	49,300 CUP
	AR2206H	.224"	2.015"	26.0	2,691 fps	41,600 CUP	28.0	2,884 fps	49,400 CUP
	AR2208	.224"	2.015"	28.5	2,869 fps	44,500 CUP	30.5	3,017 fps	49,300 CUP
70 GR. SPR SP	AR2219	.224"	1.900"	22.0	2,516 fps	40,000 CUP	24.0	2,675 fps	49,900 CUP
	Bench Mark 2	.224"	1.900"	26.0	2,829 fps	43,400 CUP	28.0	2,955 fps	49,700 CUP
	AR2206H	.224"	1.900"	23.0	2,491 fps	41,400 CUP	24.5	2,611 fps	50,000 CUP
	AR2208	.224"	1.900"	26.0	2,650 fps	43,000 CUP	28.0	2,814 fps	49,500 CUP
6mm TCU				Case: Federal Twist: 1:10" Primer: Federal 205M			Barrel length: 14" Trim length: 1.740"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
70 GR. NOS BT	AR2219	.243"	2.375"	26.5	2,600 fps	-	28.5	2,859 fps	-
	AR2206H	.243"	2.375"	27.5	2,589 fps	-	29.5	2,896 fps	-
75 GR. SPR HP	AR2219	.243"	2.480"	26.0	2,499 fps	-	28.0	2,808 fps	-
	AR2206H	.243"	2.480"	27.0	2,513 fps	-	29.0	2,819 fps	-
80 GR. HDY SP	AR2219	.243"	2.410"	25.0	2,466 fps	-	27.5	2,728 fps	-
	AR2206H	.243"	2.410"	26.0	2,480 fps	-	28.5	2,739 fps	-
85 GR. SPR SPBT	AR2219	.243"	2.500"	24.5	2,437 fps	-	26.5	2,644 fps	-
	AR2206H	.243"	2.500"	25.5	2,449 fps	-	27.5	2,649 fps	-
90 GR. SPR SP	AR2219	.243"	2.580"	24.0	2,380 fps	-	26.0	2,507 fps	-
	AR2206H	.243"	2.580"	25.0	2,401 fps	-	27.0	2,538 fps	-
100 GR. HDY SP	AR2219	.243"	2.500"	23.0	2,179 fps	-	25.0	2,398 fps	-
	AR2206H	.243"	2.500"	24.0	2,172 fps	-	26.0	2,412 fps	-

PISTOL

6mm-204 RR				Case: Hornady Twist: 1:10" Primer: Federal 205M			Barrel length: 15" Trim length: 1.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
70 GR. NOS BT	AR2219	.243"	2.480"	-	-	-	27.5	2,970 fps	-
	Bench Mark 2	.243"	2.480"	-	-	-	29.0	2,980 fps	-
	Bench Mark 8208	.243"	2.480"	-	-	-	29.6	3,020 fps	-
75 GR. HDY V-MAX	Bench Mark 2	.243"	2.480"	-	-	-	28.2	2,865 fps	-
	Bench Mark 8208	.243"	2.480"	-	-	-	28.9	2,935 fps	-
80 GR. BAR TTSX BT	Bench Mark 2	.243"	2.500"	-	-	-	27.6	2,805 fps	-
	Bench Mark 8208	.243"	2.500"	-	-	-	28.4	2,855 fps	-
6mm BR Remington				Case: Remington Twist: 1:9" Primer: Remington 7 1/2			Barrel length: 15" Trim length: 1.550"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT	AR2207	.243"	2.080"	26.0	2,963 fps	37,600 CUP	28.8	3,228 fps	51,000 CUP
	AR2219	.243"	2.080"	30.0	3,029 fps	38,800 CUP	32.5	3,275 fps	51,100 CUP
	Bench Mark 2	.243"	2.080"	31.0	2,991 fps	41,200 CUP	33.5C	3,229 fps	50,300 CUP
	AR2206H	.243"	2.080"	31.0	2,910 fps	37,300 CUP	33.0C	3,084 fps	45,300 CUP
	AR2208	.243"	2.080"	31.0	2,723 fps	31,600 CUP	34.0C	3,014 fps	41,800 CUP
58 GR. HDY V-MAX	AR2207	.243"	2.140"	26.0	2,995 fps	38,000 CUP	28.5	3,235 fps	49,900 CUP
	AR2219	.243"	2.140"	29.5	2,984 fps	40,100 CUP	31.3	3,179 fps	48,400 CUP
	Bench Mark 2	.243"	2.140"	30.0	3,013 fps	42,000 CUP	32.0	3,201 fps	50,600 CUP
	AR2206H	.243"	2.140"	31.5	3,021 fps	38,000 CUP	33.5	3,204 fps	45,100 CUP
	AR2208	.243"	2.140"	31.0	2,849 fps	34,300 CUP	34.0	3,115 fps	46,100 CUP
60 GR. SIE HP	AR2207	.243"	2.080"	25.0	2,889 fps	39,600 CUP	27.5	3,121 fps	50,700 CUP
	AR2219	.243"	2.080"	30.0	3,066 fps	42,000 CUP	32.0	3,265 fps	49,500 CUP
	Bench Mark 2	.243"	2.080"	30.0	2,945 fps	41,400 CUP	32.0	3,141 fps	49,900 CUP
	AR2206H	.243"	2.080"	31.0	2,927 fps	42,000 CUP	33.0C	3,131 fps	47,000 CUP
	AR2208	.243"	2.080"	31.0	2,753 fps	36,000 CUP	34.0C	3,056 fps	48,500 CUP
65 GR. HDY V-MAX	AR2207	.243"	2.140"	25.0	2,848 fps	42,200 CUP	27.0	3,023 fps	49,100 CUP
	AR2219	.243"	2.140"	27.0	2,761 fps	36,800 CUP	30.5	3,075 fps	49,600 CUP
	Bench Mark 2	.243"	2.140"	27.0	2,678 fps	36,000 CUP	30.5	2,987 fps	46,400 CUP
	AR2206H	.243"	2.140"	30.0	2,820 fps	37,700 CUP	33.0C	3,145 fps	49,300 CUP
	AR2208	.243"	2.140"	31.0	2,840 fps	42,200 CUP	33.0C	3,028 fps	49,900 CUP
70 GR. NOS BT	AR2219	.243"	2.100"	28.0	2,764 fps	38,700 CUP	30.0	2,979 fps	47,000 CUP
	Bench Mark 2	.243"	2.100"	29.7	2,817 fps	39,900 CUP	31.6	3,053 fps	49,000 CUP
	AR2206H	.243"	2.100"	29.0	2,657 fps	38,200 CUP	31.0	2,894 fps	47,000 CUP
	AR2208	.243"	2.100"	31.0	2,754 fps	38,900 CUP	34.0	2,986 fps	49,400 CUP
75 GR. SPR HP	AR2219	.243"	2.115"	26.0	2,656 fps	47,100 CUP	28.0	2,802 fps	47,000 CUP
	Bench Mark 2	.243"	2.115"	29.0	2,787 fps	41,700 CUP	31.0	2,978 fps	49,600 CUP
	AR2206H	.243"	2.115"	28.5	2,662 fps	40,000 CUP	30.5	2,860 fps	47,000 CUP
	AR2208	.243"	2.115"	30.5	2,709 fps	42,200 CUP	32.5	2,867 fps	50,000 CUP
80 GR. SPR SP	AR2219	.243"	2.115"	26.0	2,628 fps	39,300 CUP	28.0	2,771 fps	47,000 CUP
	Bench Mark 2	.243"	2.115"	28.5	2,713 fps	40,900 CUP	30.5	2,895 fps	49,400 CUP
	AR2206H	.243"	2.115"	28.0	2,611 fps	40,400 CUP	30.0	2,766 fps	47,000 CUP
	AR2208	.243"	2.115"	30.5	2,695 fps	43,100 CUP	32.5	2,850 fps	50,700 CUP
85 GR. SPR SP	AR2219	.243"	2.115"	22.0	2,302 fps	40,400 CUP	24.0	2,457 fps	47,000 CUP

C = Compressed Load: L = Lead Projectile

PISTOL

6mm BR Remington				Case: Remington Twist: 1:9" Primer: Remington 7 1/2			Barrel length: 15" Trim length: 1.550"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	Bench Mark 2	.243"	2.115"	27.7	2,670 fps	42,100 CUP	29.7	2,826 fps	49,800 CUP
	AR2206H	.243"	2.115"	24.5	2,326 fps	38,100 CUP	26.5	2,495 fps	49,500 CUP
	AR2208	.243"	2.115"	29.0	2,589 fps	43,100 CUP	31.0	2,761 fps	50,800 CUP
90 GR. SPR SP	AR2219	.243"	2.115"	22.0	2,275 fps	40,600 CUP	24.0	2,437 fps	48,000 CUP
	Bench Mark 2	.243"	2.115"	27.0	2,597 fps	43,200 CUP	29.0	2,761 fps	49,300 CUP
	AR2206H	.243"	2.115"	24.5	2,323 fps	40,400 CUP	27.0	2,546 fps	48,000 CUP
	AR2208	.243"	2.115"	27.5	2,488 fps	39,500 CUP	30.2	2,694 fps	47,500 CUP
100 GR. HDY SP	AR2219	.243"	2.150"	22.0	2,212 fps	42,000 CUP	23.5	2,328 fps	50,000 CUP
	Bench Mark 2	.243"	2.150"	26.0	2,447 fps	43,100 CUP	28.0	2,611 fps	49,500 CUP
	AR2206H	.243"	2.150"	24.5	2,273 fps	42,500 CUP	27.0	2,472 fps	49,000 CUP
	AR2208	.243"	2.150"	26.0	2,292 fps	43,000 CUP	28.0	2,453 fps	48,900 CUP
107 GR. SIE HPBT	AR2219	.243"	2.250"	23.0	2,272 fps	40,800 CUP	25.5	2,437 fps	49,200 CUP
	Bench Mark 2	.243"	2.250"	26.0	2,407 fps	42,000 CUP	28.0	2,575 fps	49,800 CUP
	AR2206H	.243"	2.250"	24.5	2,264 fps	37,900 CUP	27.5	2,480 fps	49,800 CUP
	AR2208	.243"	2.250"	26.0	2,255 fps	39,800 CUP	29.0C	2,497 fps	50,100 CUP
243 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 15" Trim length: 2.035"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT	Bench Mark 2	.243"	2.650"	39.0	3,288 fps	42,600 CUP	41.5	3,387 fps	50,100 CUP
	AR2206H	.243"	2.650"	40.0	3,223 fps	35,100 CUP	44.5	3,515 fps	49,300 CUP
	AR2208	.243"	2.650"	41.0	3,124 fps	42,600 CUP	45.0	3,329 fps	50,000 CUP
58 GR. HDY V-MAX	Bench Mark 2	.243"	2.600"	35.0	2,989 fps	41,800 CUP	37.5	3,177 fps	50,400 CUP
	AR2206H	.243"	2.600"	40.0	3,210 fps	43,300 CUP	43.0	3,353 fps	49,900 CUP
	AR2208	.243"	2.600"	41.0	3,198 fps	44,800 CUP	44.0	3,329 fps	49,800 CUP
60 GR. SIE HP	Bench Mark 2	.243"	2.600"	38.5	3,296 fps	47,000 CUP	41.2	3,435 fps	50,700 CUP
	AR2206H	.243"	2.600"	38.0	3,177 fps	40,500 CUP	42.0	3,264 fps	50,500 CUP
	AR2208	.243"	2.600"	40.0	3,035 fps	45,400 CUP	42.7	3,188 fps	50,400 CUP
65 GR. HDY V-MAX	Bench Mark 2	.243"	2.600"	37.0	3,090 fps	44,300 CUP	40.0	3,255 fps	50,600 CUP
	AR2206H	.243"	2.600"	38.0	3,055 fps	44,500 CUP	41.0	3,220 fps	49,200 CUP
	AR2208	.243"	2.600"	38.0	2,707 fps	43,100 CUP	41.0	3,045 fps	49,600 CUP
70 GR. SPR HP	Bench Mark 2	.243"	2.625"	36.5	3,080 fps	45,100 CUP	39.3	3,196 fps	50,300 CUP
	AR2206H	.243"	2.625"	36.0	2,912 fps	42,700 CUP	39.5	3,167 fps	49,200 CUP
	AR2208	.243"	2.625"	38.0	2,921 fps	45,500 CUP	40.5	3,061 fps	50,100 CUP
75 GR. HDY HP	AR2206H	.243"	2.640"	34.0	2,741 fps	40,900 CUP	38.0	3,018 fps	49,400 CUP
	AR2208	.243"	2.640"	36.0	2,737 fps	45,000 CUP	38.5	2,899 fps	50,500 CUP
80 GR. SIE BTSP	AR2206H	.243"	2.635"	35.0	2,786 fps	45,800 CUP	38.0	2,988 fps	50,100 CUP
	AR2208	.243"	2.635"	36.0	2,714 fps	45,400 CUP	38.5	2,854 fps	50,500 CUP
85 GR. BAR XBTC	AR2206H	.243"	2.560"	35.0	2,797 fps	45,100 CUP	38.0	2,952 fps	49,900 CUP
	AR2208	.243"	2.560"	35.0	2,621 fps	44,200 CUP	38.0	2,811 fps	50,400 CUP
	AR2209	.243"	2.560"	42.0	2,637 fps	39,700 CUP	45.5C	2,850 fps	49,600 CUP
90 GR. SPR SP	AR2206H	.243"	2.625"	34.0	2,654 fps	44,900 CUP	36.5	2,819 fps	50,800 CUP
	AR2208	.243"	2.625"	34.0	2,548 fps	44,800 CUP	36.5	2,670 fps	50,400 CUP
	AR2209	.243"	2.625"	42.0	2,729 fps	44,400 CUP	44.5	2,850 fps	50,600 CUP

C = Compressed Load; L = Lead Projectile

PISTOL

243 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 15" Trim length: 2.035"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2213SC	.243"	2.625"	45.0	2,638 fps	43,700 CUP	48.0C	2,793 fps	50,800 CUP
95 GR. NOS PART	AR2206H	.243"	2.650"	33.0	2,592 fps	45,000 CUP	35.0	2,740 fps	50,700 CUP
	AR2208	.243"	2.650"	33.0	2,485 fps	45,000 CUP	35.0	2,600 fps	50,200 CUP
	AR2209	.243"	2.650"	39.0	2,524 fps	45,800 CUP	42.0	2,688 fps	50,500 CUP
	AR2213SC	.243"	2.650"	42.0	2,459 fps	47,000 CUP	44.5C	2,589 fps	50,700 CUP
	AR2217	.243"	2.650"	45.0	2,434 fps	44,900 CUP	48.0C	2,603 fps	50,000 CUP
100 GR. SPR BTSP	AR2206H	.243"	2.650"	31.0	2,400 fps	44,900 CUP	33.0	2,521 fps	50,100 CUP
	AR2208	.243"	2.650"	31.0	2,311 fps	42,700 CUP	33.7	2,465 fps	50,400 CUP
	AR2209	.243"	2.650"	37.0	2,434 fps	45,100 CUP	40.0	2,582 fps	51,000 CUP
	AR2213SC	.243"	2.650"	39.0	2,276 fps	44,400 CUP	42.0	2,438 fps	50,100 CUP
	AR2217	.243"	2.650"	44.0	2,419 fps	45,700 CUP	47.0C	2,571 fps	49,800 CUP
105 GR. HDY A-MAX	AR2206H	.243"	2.760"	30.5	2,390 fps	44,900 CUP	32.5	2,503 fps	50,100 CUP
	AR2208	.243"	2.760"	31.0	2,297 fps	45,600 CUP	33.0	2,411 fps	50,800 CUP
	AR2209	.243"	2.760"	35.0	2,267 fps	44,300 CUP	37.5	2,443 fps	49,500 CUP
	AR2213SC	.243"	2.760"	38.0	2,227 fps	43,900 CUP	41.0	2,375 fps	50,200 CUP
	AR2217	.243"	2.760"	43.0	2,330 fps	45,400 CUP	46.0C	2,517 fps	50,200 CUP
107 GR. SIE BTHP	AR2206H	.243"	2.850"	30.5	2,348 fps	45,900 CUP	32.5	2,472 fps	49,900 CUP
	AR2208	.243"	2.850"	31.0	2,272 fps	45,300 CUP	33.0	2,385 fps	50,400 CUP
	AR2209	.243"	2.850"	35.0	2,266 fps	43,100 CUP	37.5	2,424 fps	50,200 CUP
	AR2213SC	.243"	2.850"	38.0	2,215 fps	43,700 CUP	41.0	2,360 fps	50,100 CUP
	AR2217	.243"	2.850"	43.0	2,345 fps	44,700 CUP	46.0C	2,513 fps	50,100 CUP
25 ACP				Case: Winchester Twist: 1:16" Primer: Federal 100M			Barrel length: 2" Trim length: 0.610"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. HDY XTP	AP70N	.251"	0.860"	1.5	823 fps	14,500 CUP	1.7	922 fps	16,200 CUP
50 GR.	AP50N	-	-	-	-	-	1.2	750 fps	-
50 GR. SIE FMJ	AP70N	.251"	0.900"	1.2	620 fps	12,000 CUP	1.4	751 fps	16,600 CUP
256 Winchester				Case: Winchester Twist: 1:14" Primer: Winchester SR			Barrel length: 10" Trim length: 1.271"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. HDY FP	AR2205	.257"	1.560"	15.0	2,156 fps	-	16.0	2,386 fps	-
	AR2207	.257"	1.560"	-	-	-	18.0	1,704 fps	-
75 GR. SPR HP	AR2205	.257"	1.740"	14.0	2,026 fps	-	15.0	2,120 fps	-
87 GR. HDY SP	AR2205	.257"	1.825"	13.0	1,798 fps	-	14.0	2,040 fps	-
	AR2207	.257"	1.825"	-	-	-	15.0	2,007 fps	-

PISTOL

6.5mm TCU				Case: Winchester Twist: 1:10" Primer: Winchester SR			Barrel length: 14" Trim length: 1.740"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
87 GR. SPR SP	AR2207	.264"	2.350"	21.0	2,140 fps	-	23.0	2,368 fps	-
	AR2219	.264"	2.350"	24.0	2,116 fps	-	26.0	2,310 fps	-
	AR2206H	.264"	2.350"	25.0	2,180 fps	-	27.0	2,403 fps	-
100 GR. NOS BT	AR2207	.264"	2.400"	20.0	1,914 fps	-	22.0	2,101 fps	-
	AR2219	.264"	2.400"	23.0	1,921 fps	-	25.0	2,119 fps	-
	AR2206H	.264"	2.400"	24.0	2,049 fps	-	26.0	2,229 fps	-
120 GR. SPR SP	AR2207	.264"	2.350"	19.0	1,770 fps	-	21.0	1,993 fps	-
	AR2219	.264"	2.350"	21.5	1,857 fps	-	23.5	2,036 fps	-
	AR2206H	.264"	2.350"	23.0	1,880 fps	-	25.0	2,075 fps	-
129 GR. HDY SP	AR2207	.264"	2.550"	18.0	1,688 fps	-	20.0	1,849 fps	-
	AR2219	.264"	2.550"	21.0	1,731 fps	-	23.0	1,911 fps	-
	AR2206H	.264"	2.550"	22.5	1,784 fps	-	24.5	1,970 fps	-
140 GR. HDY BTHP	AR2207	.264"	2.700"	17.0	1,590 fps	-	19.0	1,714 fps	-
	AR2219	.264"	2.700"	20.0	1,616 fps	-	22.0	1,799 fps	-
	AR2206H	.264"	2.700"	21.0	1,660 fps	-	23.0	1,842 fps	-
6.5mm BR				Case: Remington (reformed) Twist: 1:8" Primer: Remington 7 1/2			Barrel length: 15" Trim length: 1.510"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SPR TNT	AR2219	.264"	2.140"	29.0	2,558 fps	39,400 CUP	31.0	2,737 fps	49,100 CUP
	Bench Mark 2	.264"	2.140"	29.7	2,581 fps	42,300 CUP	31.7	2,808 fps	49,100 CUP
	AR2206H	.264"	2.140"	31.0	2,507 fps	35,800 CUP	33.0C	2,715 fps	44,100 CUP
	AR2208	.264"	2.140"	31.0	2,441 fps	35,400 CUP	33.0C	2,625 fps	41,500 CUP
95 GR. HDY V-MAX	AR2219	.264"	2.220"	28.8	2,540 fps	40,300 CUP	30.7	2,727 fps	50,000 CUP
	Bench Mark 2	.264"	2.220"	29.0	2,548 fps	43,200 CUP	31.0	2,707 fps	49,000 CUP
	AR2206H	.264"	2.220"	31.0	2,546 fps	40,000 CUP	33.0C	2,746 fps	48,500 CUP
	AR2208	.264"	2.220"	31.0	2,483 fps	40,000 CUP	33.0C	2,647 fps	45,900 CUP
100 GR. NOS BT	AR2219	.264"	2.220"	28.0	2,424 fps	39,400 CUP	29.7	2,573 fps	50,200 CUP
	Bench Mark 2	.264"	2.220"	28.3	2,404 fps	41,700 CUP	30.2	2,548 fps	49,400 CUP
	AR2206H	.264"	2.220"	31.0	2,531 fps	41,700 CUP	33.0C	2,707 fps	49,100 CUP
	AR2208	.264"	2.220"	31.0	2,475 fps	39,600 CUP	33.0C	2,641 fps	48,700 CUP
107 GR. HPBT	AR2219	.264"	2.340"	27.2	2,393 fps	39,100 CUP	29.0	2,528 fps	49,800 CUP
	Bench Mark 2	.264"	2.340"	27.8	2,330 fps	40,200 CUP	29.6	2,588 fps	49,400 CUP
	AR2206H	.264"	2.340"	29.8	2,489 fps	38,900 CUP	31.8C	2,633 fps	47,900 CUP
	AR2208	.264"	2.340"	30.5	2,462 fps	41,800 CUP	32.5C	2,623 fps	48,500 CUP
120 GR. NOS BT	AR2219	.264"	2.250"	26.7	2,242 fps	40,800 CUP	28.5	2,413 fps	49,500 CUP
	Bench Mark 2	.264"	2.250"	27.2	2,198 fps	43,800 CUP	29.0	2,396 fps	50,000 CUP
	AR2206H	.264"	2.250"	29.0	2,360 fps	41,300 CUP	31.0C	2,507 fps	47,700 CUP
	AR2208	.264"	2.250"	29.0	2,289 fps	39,400 CUP	31.0C	2,423 fps	45,100 CUP
129 GR. HDY SP	AR2219	.264"	2.280"	26.0	2,190 fps	44,500 CUP	27.7	2,298 fps	49,200 CUP
	Bench Mark 2	.264"	2.280"	26.3	2,148 fps	43,800 CUP	28.0	2,272 fps	49,600 CUP
	AR2206H	.264"	2.280"	28.4	2,228 fps	44,200 CUP	30.3C	2,387 fps	49,400 CUP
	AR2208	.264"	2.280"	29.0	2,237 fps	44,200 CUP	31.0C	2,387 fps	49,900 CUP
140 GR. SPR SP	AR2219	.264"	2.300"	25.0	2,075 fps	43,900 CUP	26.7	2,178 fps	50,200 CUP

C = Compressed Load; L = Lead Projectile

PISTOL

6.5mm BR				Case: Remington (reformed) Twist: 1:8" Primer: Remington 7 1/2			Barrel length: 15" Trim length: 1.510"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
142 GR. SIE HPBT	Bench Mark 2	.264"	2.300"	26.3	2,100 fps	44,200 CUP	28.0	2,229 fps	49,800 CUP
	AR2206H	.264"	2.300"	28.2	2,193 fps	44,200 CUP	30.0C	2,308 fps	49,000 CUP
	AR2208	.264"	2.300"	28.3	2,167 fps	42,100 CUP	30.2C	2,300 fps	49,000 CUP
	AR2219	.264"	2.350"	24.5	2,067 fps	44,200 CUP	26.1	2,193 fps	49,400 CUP
	Bench Mark 2	.264"	2.350"	25.2	2,065 fps	45,500 CUP	26.9	2,178 fps	49,900 CUP
	AR2206H	.264"	2.350"	27.3	2,147 fps	41,900 CUP	29.0	2,291 fps	49,300 CUP
	AR2208	.264"	2.350"	27.9	2,165 fps	40,900 CUP	29.7C	2,284 fps	49,600 CUP
6.5mm JDJ				Case: Winchester (reformed) Twist: 1:9" Primer: Winchester LR			Barrel length: 14" Trim length: 1.920"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
120 GR. SPR SP	AR2209	.264"	2.700"	35.0	2,122 fps	-	40.0	2,414 fps	-
129 GR. HDY SP	AR2213SC	.264"	2.750"	35.0	1,973 fps	-	39.0	2,194 fps	-
140 GR. SPR SP	AR2213SC	.264"	2.700"	33.0	1,651 fps	-	37.0	1,968 fps	-
270 Ren				Case: Winchester (reformed) Twist: 1:8" Primer: Winchester SR			Barrel length: 10" Trim length: 1.280"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SPR HP	AR2205	.277"	1.900"	8.5	1,370 fps	-	9.5	1,589 fps	-
100 GR. HDY SP	AR2205	.277"	1.790"	8.0	1,179 fps	-	9.0	1,404 fps	-
110 GR. HDY HP	AR2205	.277"	1.900"	7.8	1,160 fps	-	8.7	1,370 fps	-
270 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 15" Trim length: 2.530"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SIE HP	AR2206H	.277"	3.200"	50.0	3,096 fps	48,100 CUP	53.0	3,216 fps	50,400 CUP
	AR2208	.277"	3.200"	51.0	2,958 fps	46,000 CUP	55.0	3,091 fps	51,400 CUP
	AR2209	.277"	3.200"	58.0	2,859 fps	43,700 CUP	62.0C	3,051 fps	49,800 CUP
100 GR. SPR SP	AR2206H	.277"	3.145"	47.0	2,940 fps	47,000 CUP	50.0	3,051 fps	50,200 CUP
	AR2208	.277"	3.145"	48.0	2,782 fps	44,400 CUP	52.0	2,928 fps	50,200 CUP
	AR2209	.277"	3.145"	56.0	2,759 fps	44,000 CUP	59.4	2,917 fps	50,200 CUP
110 GR. HDY HP	AR2206H	.277"	3.250"	45.0	2,816 fps	46,700 CUP	47.5	2,927 fps	50,800 CUP
	AR2208	.277"	3.250"	43.0	2,479 fps	44,100 CUP	48.7	2,788 fps	50,800 CUP
	AR2209	.277"	3.250"	54.0	2,667 fps	46,900 CUP	57.0	2,843 fps	50,100 CUP
120 GR. BAR XFB	AR2206H	.277"	3.270"	42.0	2,559 fps	45,000 CUP	45.0	2,719 fps	50,400 CUP
	AR2208	.277"	3.270"	44.0	2,504 fps	46,300 CUP	47.0	2,650 fps	51,000 CUP
	AR2209	.277"	3.270"	51.0	2,533 fps	44,700 CUP	55.0	2,723 fps	51,200 CUP
	AR2213SC	.277"	3.270"	58.0	2,627 fps	45,800 CUP	62.0C	2,782 fps	51,200 CUP
130 GR. HDY SP	AR2206H	.277"	3.280"	42.0	2,528 fps	44,700 CUP	45.0	2,676 fps	51,000 CUP
	AR2208	.277"	3.280"	43.0	2,416 fps	43,900 CUP	46.0	2,557 fps	49,600 CUP

PISTOL

270 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 15" Trim length: 2.530"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
135 GR. SIE BT	AR2209	.277"	3.280"	51.0	2,501 fps	45,200 CUP	54.3	2,619 fps	50,500 CUP
	AR2213SC	.277"	3.280"	56.0	2,471 fps	44,400 CUP	60.0C	2,609 fps	51,000 CUP
	AR2217	.277"	3.280"	61.0	2,508 fps	42,900 CUP	64.0C	2,650 fps	48,100 CUP
	AR2206H	.277"	3.340"	41.0	2,465 fps	44,300 CUP	44.0	2,616 fps	50,600 CUP
	AR2208	.277"	3.340"	41.0	2,336 fps	40,800 CUP	45.0	2,523 fps	50,200 CUP
140 GR. SFT SP	AR2209	.277"	3.340"	50.0	2,460 fps	44,400 CUP	53.5	2,633 fps	50,700 CUP
	AR2213SC	.277"	3.340"	55.0	2,446 fps	43,600 CUP	59.5C	2,618 fps	51,000 CUP
	AR2217	.277"	3.340"	61.0	2,547 fps	43,100 CUP	63.0C	2,608 fps	47,600 CUP
	AR2206H	.277"	3.280"	40.0	2,381 fps	45,300 CUP	42.6	2,515 fps	50,600 CUP
	AR2208	.277"	3.280"	41.0	2,313 fps	44,300 CUP	43.7	2,437 fps	50,500 CUP
150 GR. HDY SP	AR2209	.277"	3.280"	49.0	2,458 fps	44,500 CUP	52.0	2,570 fps	50,400 CUP
	AR2213SC	.277"	3.280"	54.0	2,442 fps	43,900 CUP	58.0C	2,588 fps	50,100 CUP
	AR2217	.277"	3.280"	59.0	2,539 fps	41,800 CUP	63.0C	2,694 fps	50,800 CUP
	AR2209	.277"	3.285"	46.0	2,298 fps	43,400 CUP	49.0	2,420 fps	51,000 CUP
	AR2213SC	.277"	3.285"	52.0	2,319 fps	46,300 CUP	55.7	2,437 fps	51,200 CUP
160 GR. NOS PART	AR2217	.277"	3.285"	55.0	2,284 fps	44,900 CUP	59.0C	2,472 fps	51,000 CUP
	AR2209	.277"	3.340"	46.0	2,271 fps	43,600 CUP	49.0	2,430 fps	51,100 CUP
	AR2213SC	.277"	3.340"	50.0	2,246 fps	43,000 CUP	54.0	2,388 fps	50,500 CUP
7mm TCU	AR2217	.277"	3.340"	55.0	2,336 fps	44,200 CUP	59.0C	2,467 fps	50,900 CUP
				Case: Federal (reformed) Twist: 1:10" Primer: Federal 205			Barrel length: 14" Trim length: 1.740"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SIE HP	AR2205	.284"	2.475"	17.0	1,749 fps	-	19.0	2,011 fps	-
	AR2207	.284"	2.475"	22.0	2,007 fps	-	24.0	2,176 fps	-
	AR2219	.284"	2.475"	25.0	2,029 fps	-	26.0	2,169 fps	-
	AR2206H	.284"	2.475"	25.0	1,913 fps	-	26.0	2,071 fps	-
120 GR. SPR SP	AR2205	.284"	2.410"	16.0	1,662 fps	-	18.0	1,914 fps	-
	AR2207	.284"	2.410"	21.0	1,880 fps	-	23.0	2,075 fps	-
	AR2219	.284"	2.410"	24.0	1,898 fps	-	26.0	2,117 fps	-
	AR2206H	.284"	2.410"	24.0	1,818 fps	-	26.0	2,020 fps	-
130 GR. SPR SP	AR2205	.284"	2.465"	15.0	1,490 fps	-	17.0	1,675 fps	-
	AR2207	.284"	2.465"	20.0	1,745 fps	-	22.0	1,935 fps	-
	AR2219	.284"	2.465"	23.0	1,724 fps	-	25.0	1,988 fps	-
	AR2206H	.284"	2.465"	24.0	1,797 fps	-	26.0	2,007 fps	-
139 GR. HDY SP	AR2205	.284"	2.625"	14.5	1,441 fps	-	16.5	1,635 fps	-
	AR2207	.284"	2.625"	19.0	1,717 fps	-	21.0	1,904 fps	-
	AR2219	.284"	2.625"	22.0	1,747 fps	-	24.0	1,938 fps	-
	AR2206H	.284"	2.625"	23.0	1,750 fps	-	25.0	2,001 fps	-
150 GR. SIE HPBT	AR2205	.284"	2.630"	14.0	1,404 fps	-	16.0	1,597 fps	-
	AR2207	.284"	2.630"	18.5	1,640 fps	-	20.5	1,835 fps	-
	AR2219	.284"	2.630"	21.5	1,674 fps	-	23.5	1,859 fps	-
	AR2206H	.284"	2.630"	22.0	1,688 fps	-	24.0	1,874 fps	-
162 GR. HDY SPBT	AR2205	.284"	2.675"	13.0	1,314 fps	-	15.0	1,474 fps	-

C = Compressed Load; L = Lead Projectile

PISTOL

7mm TCU				Case: Federal (reformed) Twist: 1:10" Primer: Federal 205			Barrel length: 14" Trim length: 1.740"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2207	.284"	2.675"	17.5	1,519 fps	-	19.5	1,729 fps	-
	AR2219	.284"	2.675"	20.0	1,611 fps	-	22.0	1,792 fps	-
	AR2206H	.284"	2.675"	21.0	1,628 fps	-	23.0	1,795 fps	-
7mm BR Remington				Case: Remington Twist: 1:9.5" Primer: Winchester SR			Barrel length: 14" Trim length: 1.515"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. BAR XFB	AR2207	.284"	2.125"	26.0	2,334 fps	36,600 CUP	28.5	2,569 fps	49,900 CUP
	AR2219	.284"	2.125"	29.0	2,248 fps	37,700 CUP	31.5C	2,516 fps	49,800 CUP
	Bench Mark 2	.284"	2.125"	29.0	2,194 fps	38,800 CUP	32.0C	2,510 fps	50,100 CUP
	AR2206H	.284"	2.125"	31.0	2,309 fps	40,900 CUP	33.0C	2,486 fps	45,300 CUP
115 GR. SPR HP	AR2207	.284"	2.150"	26.0	2,254 fps	41,500 CUP	28.5	2,474 fps	50,500 CUP
	AR2219	.284"	2.150"	29.0	2,227 fps	37,200 CUP	31.5C	2,473 fps	49,800 CUP
	Bench Mark 2	.284"	2.150"	30.0	2,251 fps	41,600 CUP	32.0C	2,476 fps	49,800 CUP
	AR2206H	.284"	2.150"	31.0	2,313 fps	38,900 CUP	33.0C	2,450 fps	45,300 CUP
120 GR. HDY V-MAX	AR2207	.284"	2.300"	25.5	2,262 fps	40,200 CUP	27.5	2,397 fps	49,500 CUP
	AR2219	.284"	2.300"	28.0	2,210 fps	39,800 CUP	30.8	2,427 fps	50,400 CUP
	Bench Mark 2	.284"	2.300"	29.0	2,202 fps	43,100 CUP	31.0	2,390 fps	49,900 CUP
	AR2206H	.284"	2.300"	30.0	2,202 fps	39,600 CUP	32.7C	2,460 fps	49,800 CUP
130 GR. SIE HPBT	AR2207	.284"	2.250"	25.0	2,176 fps	40,000 CUP	27.0	2,362 fps	50,500 CUP
	AR2219	.284"	2.250"	28.0	2,170 fps	40,500 CUP	30.0C	2,387 fps	50,600 CUP
	Bench Mark 2	.284"	2.250"	28.0	2,161 fps	40,700 CUP	30.2C	2,339 fps	50,000 CUP
	AR2206H	.284"	2.250"	30.0	2,224 fps	43,900 CUP	32.0C	2,390 fps	49,200 CUP
139 GR. HDY SST	AR2207	.284"	2.260"	24.0	2,078 fps	42,500 CUP	26.0	2,262 fps	49,800 CUP
	AR2219	.284"	2.260"	26.5	2,094 fps	40,100 CUP	28.5C	2,251 fps	49,700 CUP
	Bench Mark 2	.284"	2.260"	27.5	2,078 fps	41,200 CUP	29.7C	2,267 fps	49,900 CUP
	AR2206H	.284"	2.260"	29.0	2,117 fps	41,200 CUP	31.0C	2,263 fps	47,000 CUP
145 GR. SPR SPBT	AR2219	.284"	2.200"	27.0	2,087 fps	37,400 CUP	28.5C	2,221 fps	47,500 CUP
	Bench Mark 2	.284"	2.200"	27.5	2,052 fps	40,400 CUP	29.7C	2,263 fps	50,400 CUP
	AR2206H	.284"	2.200"	29.0	2,143 fps	42,400 CUP	31.0C	2,264 fps	47,500 CUP
150 GR. NOS BT	AR2219	.284"	2.340"	26.5	2,045 fps	40,400 CUP	28.5C	2,206 fps	49,600 CUP
	Bench Mark 2	.284"	2.340"	27.0	2,012 fps	41,900 CUP	29.5C	2,228 fps	50,200 CUP
	AR2206H	.284"	2.340"	28.5	2,054 fps	39,600 CUP	30.5C	2,216 fps	48,300 CUP
162 GR. HDY A-MAX	AR2219	.284"	2.400"	26.0	1,973 fps	39,800 CUP	28.3	2,174 fps	49,800 CUP
	Bench Mark 2	.284"	2.400"	27.0	1,998 fps	41,200 CUP	29.0C	2,170 fps	49,500 CUP
	AR2206H	.284"	2.400"	27.5	1,963 fps	37,500 CUP	29.5C	2,132 fps	49,600 CUP
168 GR. SIE HPBT	AR2219	.284"	2.320"	26.0	1,985 fps	40,300 CUP	28.0	2,125 fps	49,600 CUP
	Bench Mark 2	.284"	2.320"	26.5	1,986 fps	41,400 CUP	28.5	2,118 fps	49,700 CUP
	AR2206H	.284"	2.320"	28.0	2,028 fps	42,300 CUP	30.0C	2,160 fps	49,200 CUP

PISTOL

7-30 Waters				Case: Federal			Barrel length: 15"		
				Twist: 1:9.5"			Trim length: 2.030"		
				Primer: Federal 210					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY HP	AR2219	.284"	2.700"	27.0	2,185 fps	30,500 CUP	30.0	2,449 fps	40,200 CUP
	Bench Mark 2	.284"	2.700"	27.0	2,179 fps	29,600 CUP	30.5	2,414 fps	39,300 CUP
	AR2206H	.284"	2.700"	34.0	2,451 fps	33,500 CUP	37.0C	2,639 fps	39,200 CUP
	AR2208	.284"	2.700"	35.0	2,374 fps	31,400 CUP	38.0C	2,530 fps	35,000 CUP
120 GR. NOS FP	AR2219	.284"	2.550"	26.0	2,040 fps	29,500 CUP	29.0	2,263 fps	40,200 CUP
	Bench Mark 2	.284"	2.550"	26.5	2,078 fps	31,500 CUP	29.5	2,274 fps	40,200 CUP
	AR2206H	.284"	2.550"	31.0	2,242 fps	33,200 CUP	34.5	2,437 fps	39,400 CUP
	AR2208	.284"	2.550"	34.0	2,280 fps	31,100 CUP	37.0C	2,446 fps	40,000 CUP
130 GR. SIE HPBT	AR2219	.284"	2.720"	25.0	1,961 fps	31,600 CUP	27.3	2,152 fps	39,300 CUP
	Bench Mark 2	.284"	2.720"	25.0	1,960 fps	28,900 CUP	28.0	2,172 fps	40,100 CUP
	AR2206H	.284"	2.720"	31.0	2,178 fps	31,000 CUP	33.4C	2,323 fps	39,500 CUP
	AR2208	.284"	2.720"	32.0	2,129 fps	30,600 CUP	35.6C	2,341 fps	40,100 CUP
139 GR. HDY FP	AR2219	.284"	2.550"	24.0	1,836 fps	28,500 CUP	27.0	2,073 fps	39,400 CUP
	Bench Mark 2	.284"	2.550"	25.0	1,865 fps	31,000 CUP	28.0	2,075 fps	39,600 CUP
	AR2206H	.284"	2.550"	30.0	2,074 fps	32,900 CUP	33.0	2,242 fps	39,800 CUP
	AR2208	.284"	2.550"	32.0	2,091 fps	30,900 CUP	35.5C	2,260 fps	39,100 CUP
145 GR. SPR SP	Bench Mark 2	.284"	2.720"	25.0	1,855 fps	30,200 CUP	28.0	2,054 fps	40,100 CUP
	AR2206H	.284"	2.720"	29.0	2,055 fps	35,100 CUP	29.0	2,192 fps	39,900 CUP
	AR2208	.284"	2.720"	31.0	2,051 fps	33,600 CUP	34.2	2,212 fps	39,700 CUP
150 GR. NOS BT	Bench Mark 2	.284"	2.780"	23.0	1,747 fps	30,400 CUP	26.0	1,963 fps	39,200 CUP
	AR2206H	.284"	2.780"	29.0	2,019 fps	33,300 CUP	32.0C	2,169 fps	39,600 CUP
	AR2208	.284"	2.780"	31.0	2,030 fps	32,900 CUP	34.2C	2,187 fps	40,000 CUP
168 GR. SIE HPBT	Bench Mark 2	.284"	2.780"	23.0	1,718 fps	31,600 CUP	25.5	1,893 fps	39,800 CUP
	AR2206H	.284"	2.780"	28.0	1,977 fps	34,400 CUP	30.2	2,045 fps	38,600 CUP
	AR2208	.284"	2.780"	29.0	1,912 fps	33,000 CUP	32.0C	2,062 fps	39,200 CUP

7mm IHMSA				Case: IHMSA			Barrel length: 14"		
				Twist: 1:9"			Trim length: 1.865"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY HP	AR2207	.284"	2.650"	31.0	2,297 fps	-	33.0	2,514 fps	-
	AR2219	.284"	2.650"	34.0	2,330 fps	-	36.0	2,482 fps	-
	AR2206H	.284"	2.650"	36.0	2,319 fps	-	38.0	2,498 fps	-
	AR2209	.284"	2.650"	42.0	2,311 fps	-	44.0	2,483 fps	-
	AR2213SC	.284"	2.650"	42.0	2,174 fps	-	44.0	2,349 fps	-
120 GR. SIE SP	AR2207	.284"	2.700"	30.0	2,185 fps	-	32.0	2,371 fps	-
	AR2219	.284"	2.700"	33.0	2,131 fps	-	35.0	2,339 fps	-
	AR2206H	.284"	2.700"	35.0	2,192 fps	-	37.0	2,387 fps	-
	AR2209	.284"	2.700"	42.0	2,262 fps	-	44.0	2,431 fps	-
	AR2213SC	.284"	2.700"	42.0	2,137 fps	-	44.0	2,295 fps	-
130 GR. SIE SP	AR2207	.284"	2.730"	29.0	2,129 fps	-	31.0	2,307 fps	-
	AR2219	.284"	2.730"	32.0	2,143 fps	-	34.0	2,297 fps	-
	AR2206H	.284"	2.730"	34.0	2,136 fps	-	36.0	2,298 fps	-
	AR2209	.284"	2.730"	41.0	2,239 fps	-	43.0	2,388 fps	-
	AR2213SC	.284"	2.730"	42.0	2,146 fps	-	44.0	2,264 fps	-

C = Compressed Load; L = Lead Projectile

PISTOL

7mm IHMSA				Case: IHMSA Twist: 1:9" Primer: Winchester LR			Barrel length: 14" Trim length: 1.865"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
145 GR. SPR SP	AR2207	.284"	2.750"	28.0	2,007 fps	-	30.0	2,193 fps	-
	AR2219	.284"	2.750"	31.0	2,043 fps	-	33.0	2,217 fps	-
	AR2206H	.284"	2.750"	33.0	2,033 fps	-	35.0	2,212 fps	-
	AR2209	.284"	2.750"	40.0	2,131 fps	-	42.0	2,269 fps	-
	AR2213SC	.284"	2.750"	41.0	2,019 fps	-	43.0	2,169 fps	-
154 GR. HDY SP	AR2219	.284"	2.750"	30.0	2,004 fps	-	32.0	2,139 fps	-
	AR2206H	.284"	2.750"	32.0	2,036 fps	-	34.0	2,165 fps	-
	AR2209	.284"	2.750"	39.0	2,070 fps	-	41.0	2,210 fps	-
	AR2213SC	.284"	2.750"	41.0	2,091 fps	-	43.0	2,223 fps	-
160 GR. SPR SPBT	AR2219	.284"	2.760"	29.5	1,904 fps	-	31.5	2,068 fps	-
	AR2206H	.284"	2.760"	31.5	1,981 fps	-	33.5	2,106 fps	-
	AR2209	.284"	2.760"	38.0	2,036 fps	-	40.5	2,163 fps	-
	AR2213SC	.284"	2.760"	41.0	2,026 fps	-	43.0	2,156 fps	-
168 GR. SIE HPBT	AR2219	.284"	2.770"	29.0	1,926 fps	-	31.0	2,047 fps	-
	AR2206H	.284"	2.770"	31.0	1,966 fps	-	33.0	2,075 fps	-
	AR2209	.284"	2.770"	37.0	2,009 fps	-	40.0	2,152 fps	-
	AR2213SC	.284"	2.770"	40.0	1,978 fps	-	42.0	2,106 fps	-
175 GR. SIE SPBT	AR2219	.284"	2.800"	28.0	1,779 fps	-	30.0	1,905 fps	-
	AR2206H	.284"	2.800"	30.0	1,862 fps	-	32.0	1,987 fps	-
	AR2209	.284"	2.800"	36.0	1,942 fps	-	39.5	2,066 fps	-
	AR2213SC	.284"	2.800"	39.0	1,982 fps	-	41.0	2,094 fps	-
7mm-08 Remington				Case: Remington Twist: 1:9.5" Primer: Remington 9 1/2			Barrel length: 15" Trim length: 2.025"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. BAR XFB	Bench Mark 2	.284"	2.650"	40.0	2,655 fps	41,400 CUP	42.5	2,827 fps	49,600 CUP
	AR2206H	.284"	2.650"	41.0	2,585 fps	41,000 CUP	45.0	2,942 fps	49,900 CUP
	AR2208	.284"	2.650"	42.0	2,636 fps	40,800 CUP	45.7	2,931 fps	49,600 CUP
130 GR. SIE HPBT	Bench Mark 2	.284"	2.800"	37.0	2,339 fps	41,500 CUP	39.8	2,558 fps	50,200 CUP
	AR2206H	.284"	2.800"	39.5	2,454 fps	43,500 CUP	42.0	2,632 fps	50,200 CUP
	AR2208	.284"	2.800"	40.0	2,460 fps	43,400 CUP	43.5	2,710 fps	50,100 CUP
139 GR. HDY SP	Bench Mark 2	.284"	2.800"	37.5	2,351 fps	40,300 CUP	40.5	2,520 fps	49,600 CUP
	AR2206H	.284"	2.800"	39.0	2,369 fps	42,500 CUP	42.5	2,575 fps	50,200 CUP
	AR2208	.284"	2.800"	40.5	2,436 fps	44,700 CUP	43.5	2,612 fps	50,000 CUP
	AR2209	.284"	2.800"	47.0	2,408 fps	40,400 CUP	50.0C	2,581 fps	47,500 CUP
150 GR. SIE HPBT	Bench Mark 2	.284"	2.800"	36.0	2,283 fps	43,300 CUP	38.5	2,408 fps	50,200 CUP
	AR2206H	.284"	2.800"	37.0	2,298 fps	43,300 CUP	40.5	2,499 fps	50,000 CUP
	AR2208	.284"	2.800"	38.5	2,345 fps	42,400 CUP	41.3	2,508 fps	50,000 CUP
	AR2209	.284"	2.800"	45.0	2,333 fps	42,000 CUP	48.5C	2,552 fps	50,300 CUP
162 GR. HDY A-MAX	Bench Mark 2	.284"	2.875"	36.0	2,264 fps	43,100 CUP	38.0	2,394 fps	49,200 CUP
	AR2206H	.284"	2.875"	37.0	2,239 fps	43,700 CUP	39.5	2,429 fps	49,800 CUP
	AR2208	.284"	2.875"	38.5	2,312 fps	43,400 CUP	41.0	2,468 fps	49,800 CUP
	AR2209	.284"	2.875"	45.0	2,302 fps	42,600 CUP	48.0C	2,472 fps	49,800 CUP
168 GR. SIE HPBT	Bench Mark 2	.284"	2.800"	36.0	2,211 fps	43,500 CUP	38.0	2,343 fps	49,400 CUP

C = Compressed Load; L = Lead Projectile

PISTOL

7mm-08 Remington				Case: Remington Twist: 1:9.5" Primer: Remington 9 1/2			Barrel length: 15" Trim length: 2.025"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
175 GR. NOS PART	AR2206H	.284"	2.800"	36.5	2,211 fps	45,400 CUP	39.0	2,345 fps	49,700 CUP
	AR2208	.284"	2.800"	37.5	2,231 fps	44,600 CUP	40.0	2,380 fps	50,100 CUP
	AR2209	.284"	2.800"	44.5	2,255 fps	42,600 CUP	47.2C	2,404 fps	50,000 CUP
	Bench Mark 2	.284"	2.800"	34.0	2,107 fps	42,400 CUP	36.5	2,213 fps	49,700 CUP
	AR2206H	.284"	2.800"	35.0	2,117 fps	44,500 CUP	37.5	2,228 fps	49,700 CUP
	AR2208	.284"	2.800"	35.0	2,134 fps	43,400 CUP	37.5	2,236 fps	49,500 CUP
	AR2209	.284"	2.800"	42.0	2,152 fps	41,900 CUP	45.0C	2,325 fps	49,900 CUP
30 Luger (7.65mm Parabellum)				Case: Twist: - Primer:			Barrel length: 4.5" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR.	AP50N	.309"	1.150"	-	-	-	4.0	1,000 fps	-
95 GR.	AP50N	.309"	1.150"	-	-	-	3.8	925 fps	-
30 Carbine (30 M1 Carbine)				Case: Winchester Twist: 1:20" Primer: CCI 400			Barrel length: 7" Trim length: 1.286"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE RN	AR2205	.308"	1.625"	14.5	1,643 fps	25,200 CUP	15.5C	1,745 fps	30,700 CUP
100 GR. SPR SP	AR2205	.308"	1.625"	13.0	1,503 fps	28,900 CUP	14.5C	1,621 fps	33,600 CUP
110 GR. HDY JRN	AR2205	.308"	1.680"	13.0	1,461 fps	30,100 CUP	14.5C	1,602 fps	38,800 CUP
30 Herrett				Case: Federal (reformed) Twist: 1:14" Primer: Federal 210			Barrel length: 10" Trim length: 1.595"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. HDY SPBT	AR2207	.308"	2.320"	19.0	1,623 fps	-	22.0	1,797 fps	-
	AR2219	.308"	2.320"	23.0	1,609 fps	-	24.0	1,654 fps	-
30 Mauser (7.6mm Mauser)				Case: Twist: - Primer:			Barrel length: 5.5" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR.	AP50N	-	-	-	-	-	4.5	1,225 fps	-
95 GR.	AP50N	-	-	-	-	-	3.8	1,100 fps	-

PISTOL

30-30 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 14" Trim length: 2.029"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
130 GR. SPR FP	Bench Mark 2	.308"	2.540"	27.7	1,905 fps	33,700 CUP	29.7	2,020 fps	37,100 CUP
	AR2206H	.308"	2.540"	31.5	1,984 fps	27,600 CUP	35.0	2,194 fps	35,300 CUP
	AR2208	.308"	2.540"	32.5	1,988 fps	30,200 CUP	36.0C	2,238 fps	35,700 CUP
150 GR. SIE FN	Bench Mark 2	.308"	2.550"	27.0	1,817 fps	32,100 CUP	29.0	1,944 fps	37,200 CUP
	AR2206H	.308"	2.550"	30.5	1,899 fps	27,900 CUP	34.0	2,116 fps	36,700 CUP
	AR2208	.308"	2.550"	31.0	1,907 fps	31,100 CUP	34.5	2,119 fps	36,200 CUP
170 GR. SIE FP	Bench Mark 2	.308"	2.550"	25.3	1,686 fps	32,200 CUP	27.0	1,782 fps	36,100 CUP
	AR2206H	.308"	2.550"	27.5	1,704 fps	28,200 CUP	30.5	1,896 fps	35,200 CUP
	AR2208	.308"	2.550"	29.5	1,806 fps	30,200 CUP	33.0	2,023 fps	36,500 CUP
308 Winchester				Case: Winchester Twist: 1:12" Primer: Federal 210M			Barrel length: 15" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. BAR XFB	AR2207	.308"	2.800"	37.0	2,644 fps	40,700 CUP	40.0	2,841 fps	51,000 CUP
	AR2219	.308"	2.800"	42.0	2,676 fps	43,600 CUP	45.0	2,879 fps	51,800 CUP
	Bench Mark 2	.308"	2.800"	44.0	2,722 fps	42,400 CUP	48.0	2,944 fps	50,800 CUP
110 GR. BAR TSX	Bench Mark 8208	.308"	2.690"	45.5	2,695 fps	37,700 PSI	50.0C	2,965 fps	50,000 PSI
110 GR. BAR XFB	AR2206H	.308"	2.800"	45.0	2,617 fps	39,000 CUP	49.0C	2,887 fps	49,900 CUP
	AR2208	.308"	2.800"	48.0	2,738 fps	42,100 CUP	50.0C	2,921 fps	46,100 CUP
125 GR. SIE SP	AR2207	.308"	2.700"	36.0	2,446 fps	46,600 CUP	39.5	2,662 fps	49,800 CUP
	AR2219	.308"	2.700"	42.0	2,611 fps	43,400 CUP	45.0	2,787 fps	51,400 CUP
	Bench Mark 2	.308"	2.700"	43.0	2,545 fps	40,600 CUP	47.5	2,827 fps	50,700 CUP
	Bench Mark 8208	.308"	2.700"	46.0	2,707 fps	50,200 PSI	49.2C	2,887 fps	60,100 PSI
	AR2206H	.308"	2.700"	45.0	2,579 fps	36,800 CUP	49.0C	2,831 fps	48,400 CUP
	AR2208	.308"	2.700"	48.0	2,727 fps	42,400 CUP	50.0C	2,843 fps	45,700 CUP
130 GR. SPR HP	AR2207	.308"	2.615"	35.0	2,472 fps	44,700 CUP	37.0	2,590 fps	49,700 CUP
	AR2219	.308"	2.615"	40.0	2,481 fps	41,200 CUP	43.0	2,664 fps	49,800 CUP
	Bench Mark 2	.308"	2.615"	41.0	2,429 fps	38,800 CUP	46.0	2,767 fps	50,100 CUP
130 GR. SPR SP	Bench Mark 8208	.308"	2.615"	43.0	2,531 fps	46,900 PSI	48.0C	2,856 fps	62,000 PSI
130 GR. SPR HP	AR2206H	.308"	2.615"	45.0	2,599 fps	41,800 CUP	49.0C	2,831 fps	50,100 CUP
	AR2208	.308"	2.615"	47.0	2,706 fps	42,900 CUP	50.0C	2,847 fps	50,400 CUP
150 GR. NOS BT	Trail Boss	.308"	2.800"	10.0	1,060 fps	25,800 PSI	14.0	1,344 fps	27,100 PSI
	AR2219	.308"	2.800"	37.0	2,284 fps	39,100 CUP	40.0	2,471 fps	50,500 CUP
	Bench Mark 2	.308"	2.800"	39.0	2,315 fps	38,800 CUP	43.0	2,596 fps	49,000 CUP
	Bench Mark 8208	.308"	2.800"	40.0	2,330 fps	45,500 PSI	44.5C	2,635 fps	60,800 PSI
	AR2206H	.308"	2.800"	43.0	2,478 fps	43,200 CUP	45.5	2,649 fps	51,000 CUP
	AR2208	.308"	2.800"	44.0	2,522 fps	43,300 CUP	47.0C	2,675 fps	50,300 CUP
155 GR. SIE HPBT	AR2219	.308"	2.775"	38.0	2,283 fps	42,400 CUP	41.0	2,520 fps	49,400 CUP
	Bench Mark 2	.308"	2.775"	39.0	2,271 fps	41,900 CUP	43.0	2,549 fps	50,200 CUP
	Bench Mark 8208	.308"	2.775"	41.0	2,362 fps	47,300 PSI	45.3	2,650 fps	60,900 PSI
	AR2206H	.308"	2.775"	43.0	2,476 fps	42,000 CUP	46.0	2,668 fps	49,700 CUP
	AR2208	.308"	2.775"	44.0	2,502 fps	41,300 CUP	47.0C	2,680 fps	49,400 CUP
165 GR. HDY SP	Bench Mark 2	.308"	2.750"	38.5	2,261 fps	40,200 CUP	42.5	2,487 fps	50,500 CUP
	Bench Mark 8208	.308"	2.750"	38.5	2,219 fps	49,100 PSI	42.8	2,506 fps	60,200 PSI

C = Compressed Load; L = Lead Projectile

PISTOL

308 Winchester				Case: Winchester Twist: 1:12" Primer: Federal 210M			Barrel length: 15" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.308"	2.750"	41.0	2,341 fps	38,600 CUP	43.5	2,497 fps	50,000 CUP
	AR2208	.308"	2.750"	42.0	2,384 fps	40,800 CUP	46.0C	2,576 fps	50,500 CUP
168 GR. SIE HPBT	Bench Mark 2	.308"	2.800"	38.0	2,247 fps	38,100 CUP	42.0	2,463 fps	49,300 CUP
	Bench Mark 8208	.308"	2.800"	39.0	2,235 fps	49,000 PSI	43.3	2,521 fps	61,500 PSI
	AR2206H	.308"	2.800"	41.0	2,312 fps	38,300 CUP	43.5	2,484 fps	49,500 CUP
	AR2208	.308"	2.800"	42.0	2,386 fps	41,200 CUP	46.0C	2,580 fps	50,600 CUP
175 GR. SIE HPBT	Bench Mark 2	.308"	2.800"	38.0	2,231 fps	40,100 CUP	41.5	2,415 fps	50,800 CUP
	Bench Mark 8208	.308"	2.800"	39.0	2,232 fps	52,200 PSI	42.5	2,456 fps	61,800 PSI
	AR2206H	.308"	2.800"	40.0	2,274 fps	39,100 CUP	42.7	2,422 fps	49,000 CUP
	AR2208	.308"	2.800"	42.0	2,370 fps	42,600 CUP	45.0C	2,539 fps	48,600 CUP
180 GR. SPR SP	Bench Mark 2	.308"	2.800"	38.0	2,200 fps	40,700 CUP	41.3	2,361 fps	50,800 CUP
	Bench Mark 8208	.308"	2.800"	36.0	2,082 fps	51,600 PSI	40.0	2,264 fps	60,100 PSI
	AR2206H	.308"	2.800"	40.0	2,237 fps	41,200 CUP	42.5	2,359 fps	49,700 CUP
	AR2208	.308"	2.800"	41.0	2,274 fps	41,200 CUP	45.0C	2,480 fps	49,600 CUP
30-06 Springfield				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 15" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY SP	AR2206H	.308"	3.170"	51.0	2,792 fps	39,000 CUP	57.0	2,978 fps	49,300 CUP
	AR2208	.308"	3.170"	55.0	2,774 fps	44,400 CUP	59.0	2,910 fps	48,500 CUP
125 GR. SIE SP	AR2206H	.308"	3.150"	48.0	2,680 fps	41,400 CUP	53.7	2,892 fps	49,300 CUP
	AR2208	.308"	3.150"	54.0	2,731 fps	45,500 CUP	57.2	2,820 fps	49,500 CUP
130 GR. SPR HP	AR2206H	.308"	3.060"	48.0	2,673 fps	38,600 CUP	53.1	2,838 fps	46,100 CUP
	AR2208	.308"	3.060"	49.0	2,542 fps	41,300 CUP	53.5	2,690 fps	48,400 CUP
150 GR. NOS BT	AR2206H	.308"	3.250"	46.0	2,503 fps	44,400 CUP	51.0	2,721 fps	48,500 CUP
	AR2208	.308"	3.250"	47.0	2,442 fps	42,600 CUP	51.0	2,582 fps	50,000 CUP
	AR2209	.308"	3.250"	56.0	2,440 fps	37,100 CUP	62.0C	2,704 fps	48,400 CUP
155 GR. SIE HPBT	AR2206H	.308"	3.225"	46.0	2,428 fps	41,200 CUP	51.0	2,692 fps	45,600 CUP
	AR2208	.308"	3.225"	48.0	2,445 fps	44,600 CUP	50.7	2,558 fps	48,800 CUP
	AR2209	.308"	3.225"	56.0	2,392 fps	36,000 CUP	62.0C	2,647 fps	47,500 CUP
165 GR. SIE SPBT	AR2206H	.308"	3.300"	43.0	2,360 fps	41,100 CUP	47.5	2,521 fps	49,000 CUP
	AR2208	.308"	3.300"	47.0	2,384 fps	44,500 CUP	50.5	2,534 fps	49,700 CUP
	AR2209	.308"	3.300"	53.0	2,355 fps	38,400 CUP	59.0	2,562 fps	49,400 CUP
168 GR. HDY HPBT	AR2206H	.308"	3.230"	43.0	2,356 fps	41,200 CUP	47.5	2,529 fps	50,000 CUP
	AR2208	.308"	3.230"	47.0	2,389 fps	42,700 CUP	50.5	2,526 fps	49,200 CUP
	AR2209	.308"	3.230"	55.0	2,374 fps	40,400 CUP	59.0	2,525 fps	48,100 CUP
175 GR. SIE HPBT	AR2206H	.308"	3.300"	43.8	2,295 fps	44,100 CUP	46.7	2,440 fps	49,000 CUP
	AR2208	.308"	3.300"	45.0	2,315 fps	41,700 CUP	48.0	2,437 fps	49,000 CUP
	AR2209	.308"	3.300"	55.0	2,422 fps	42,100 CUP	59.0	2,600 fps	48,700 CUP
	AR2213SC	.308"	3.300"	57.0	2,341 fps	38,300 CUP	61.5C	2,488 fps	44,400 CUP
180 GR. SIE SPBT	AR2206H	.308"	3.300"	41.0	2,200 fps	38,100 CUP	46.0	2,421 fps	48,800 CUP
	AR2208	.308"	3.300"	44.0	2,226 fps	41,900 CUP	47.0	2,342 fps	50,000 CUP
	AR2209	.308"	3.300"	52.0	2,288 fps	37,800 CUP	57.5	2,480 fps	49,300 CUP
	AR2213SC	.308"	3.300"	54.0	2,132 fps	34,700 CUP	60.0	2,332 fps	44,300 CUP

C = Compressed Load; L = Lead Projectile

PISTOL

30-06 Springfield				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 15" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
190 GR. HDY SPBT	AR2206H	.308"	3.220"	41.0	2,208 fps	41,400 CUP	45.5	2,376 fps	48,000 CUP
	AR2208	.308"	3.220"	43.5	2,197 fps	41,800 CUP	46.5	2,314 fps	49,700 CUP
	AR2209	.308"	3.220"	51.0	2,201 fps	39,500 CUP	56.5	2,433 fps	49,200 CUP
	AR2213SC	.308"	3.220"	57.0	2,223 fps	44,100 CUP	61.0C	2,393 fps	50,000 CUP
200 GR. NOS AB	AR2206H	.308"	3.300"	41.0	2,158 fps	43,700 CUP	44.0	2,268 fps	49,500 CUP
	AR2208	.308"	3.300"	42.0	2,144 fps	41,900 CUP	47.0	2,315 fps	49,100 CUP
	AR2209	.308"	3.300"	50.0	2,185 fps	40,400 CUP	53.7	2,358 fps	48,400 CUP
	AR2213SC	.308"	3.300"	55.0	2,220 fps	42,100 CUP	59.0C	2,372 fps	49,300 CUP
	AR2217	.308"	3.300"	57.0	2,062 fps	35,800 CUP	61.0C	2,222 fps	42,200 CUP
200 GR. SPR SP	AR2206H	.308"	3.230"	39.0	2,059 fps	40,700 CUP	43.5	2,262 fps	49,200 CUP
	AR2208	.308"	3.230"	42.5	2,136 fps	44,700 CUP	45.5	2,258 fps	49,600 CUP
	AR2209	.308"	3.230"	50.0	2,234 fps	44,500 CUP	53.0	2,334 fps	49,100 CUP
	AR2213SC	.308"	3.230"	54.0	2,163 fps	43,200 CUP	57.5C	2,269 fps	49,400 CUP
	AR2217	.308"	3.230"	55.0	2,050 fps	33,600 CUP	61.0C	2,261 fps	44,400 CUP
220 GR. HDY JRN	AR2208	.308"	3.230"	42.0	2,041 fps	44,000 CUP	45.0	2,166 fps	49,400 CUP
	AR2209	.308"	3.230"	50.0	2,146 fps	43,400 CUP	53.0	2,254 fps	49,200 CUP
	AR2213SC	.308"	3.230"	54.0	2,041 fps	43,300 CUP	57.5C	2,156 fps	48,600 CUP
	AR2217	.308"	3.230"	58.0	2,055 fps	36,500 CUP	61.0C	2,172 fps	43,600 CUP
250 GR. BAR JRN	AR2209	.308"	3.200"	45.0	1,941 fps	43,000 CUP	47.5	2,031 fps	48,400 CUP
	AR2213SC	.308"	3.200"	50.0	1,897 fps	43,900 CUP	52.5C	2,009 fps	49,600 CUP
	AR2217	.308"	3.200"	55.0	1,920 fps	43,600 CUP	58.0C	2,019 fps	49,500 CUP
32 ACP				Case: Winchester Twist: 1:16" Primer: Federal 100M			Barrel length: 4" Trim length: 0.675"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
71 GR. SIE FMJ	AS30N	.312"	0.978"	1.5	745 fps	11,700 CUP	1.7	830 fps	15,000 CUP
	AP70N	.312"	0.978"	2.2	781 fps	11,600 CUP	2.4	881 fps	14,900 CUP
32 Smith & Wesson				Case: Winchester Twist: 1:18.75" Primer: Winchester SP			Barrel length: 4" Trim length: 0.600"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. CAST LRN	AS30N	.314"	0.930"	-	-	-	1.2	600 fps	-
	AP50N	.314"	0.930"	-	-	-	1.4	650 fps	-
	AP70N	.314"	0.930"	-	-	-	1.8	730 fps	-

PISTOL

32 S&W Long				Case: Remington Twist: 1:18.75" Primer: CCI 500			Barrel length: 5.32" Trim length: 0.915"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
83 GR. BERB HBWC	AP70N	.314"	0.920"	2.2	592 fps	7,000 CUP	2.7	798 fps	10,500 CUP
85 GR. HDY JHP	AP70N	.312"	1.160"	2.7	705 fps	8,000 CUP	3.0	865 fps	12,000 CUP
90 GR. HDY LSWC	Trail Boss	.314"	1.185"	1.5	599 fps	5,900 CUP	2.9	730 fps	8,100 CUP
	AP70N	.314"	1.185"	2.4	777 fps	8,800 CUP	2.7	844 fps	10,200 CUP
90 GR. SIE JHC	AP70N	.312"	1.170"	2.6	676 fps	7,500 CUP	2.9	838 fps	11,200 CUP
98 GR. SPR LHBWC	AP70N	.314"	0.920"	1.9	675 fps	6,100 CUP	2.2	830 fps	11,000 CUP
32 North American Arms				Case: Corbon Twist: 1:16" Primer: Winchester SP			Barrel length: 2.5" Trim length: 0.670"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. SPR GDHP	AS30N	.312"	0.930"	2.3	960 fps	15,700 PSI	2.6	1,053 fps	21,800 PSI
	AP70N	.312"	0.930"	3.8	1,068 fps	15,500 PSI	4.1	1,189 fps	20,200 PSI
71 GR. HDY FMJ/RN	AS30N	.311"	0.940"	2.2	895 fps	18,200 PSI	2.4	946 fps	22,000 PSI
	AP70N	.311"	0.940"	3.4	985 fps	16,400 PSI	3.8	1,087 fps	21,200 PSI
32 H&R Magnum				Case: Federal Twist: 1:16" Primer: Federal 100			Barrel length: 5" Trim length: 1.070"		
NOTE: See Single Action Pistol section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. HDY HP	AP70N	.312"	1.290"	4.0	1,090 fps	18,400 CUP	4.3	1,123 fps	19,000 CUP
	AR2205	.312"	1.290"	8.5	989 fps	19,300 CUP	9.5	1,151 fps	21,000 CUP
90 GR. SIE JHP	AP70N	.312"	1.340"	3.7	1,008 fps	16,900 CUP	4.0	1,072 fps	20,000 CUP
	AR2205	.312"	1.340"	9.5	1,042 fps	15,000 CUP	10.0	1,079 fps	17,000 CUP
100 GR. SPR JHP	AP70N	.312"	1.345"	3.3	847 fps	14,300 CUP	3.7	973 fps	19,900 CUP
	AR2205	.312"	1.345"	9.0	980 fps	15,700 CUP	10.0	1,060 fps	19,300 CUP
327 Federal Magnum				Case: Federal Twist: 1:16" Primer: Federal 200			Barrel length: 5" Trim length: 1.200"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
77 GR. CAST LFP	AS30N	.314"	1.460"	3.7	1,121 fps	18,000 PSI	4.5	1,297 fps	30,900 PSI
	Trail Boss	.314"	1.460"	3.0	919 fps	12,300 PSI	3.5	1,024 fps	18,700 PSI
	AP70N	.314"	1.460"	4.9	1,190 fps	15,700 PSI	5.5	1,357 fps	22,800 PSI
85 GR. HDY XTP	AP70N	.312"	1.450"	5.3	1,253 fps	32,100 PSI	6.0	1,378 fps	38,700 PSI
90 GR. LHBWC	AS30N	.314"	1.200"	1.9	792 fps	17,800 PSI	2.2	856 fps	20,600 PSI
90 GR. CAST LRNFP	AS30N	.312"	1.460"	3.5	1,065 fps	26,400 PSI	4.2	1,186 fps	37,900 PSI
90 GR. LHBWC	AP70N	.314"	1.200"	2.4	721 fps	9,100 PSI	2.8	869 fps	12,500 PSI
90 GR. CAST LRNFP	Trail Boss	.312"	1.460"	2.7	789 fps	11,200 PSI	3.2	890 fps	14,800 PSI
	AP70N	.312"	1.460"	4.3	1,090 fps	16,600 PSI	5.2	1,274 fps	27,800 PSI
90 GR. SIE JHC	AP70N	.312"	1.460"	5.3	1,275 fps	26,800 PSI	5.7	1,372 fps	40,900 PSI
100 GR. HDY XTP	AP70N	.312"	1.450"	4.5	1,087 fps	28,000 PSI	5.4	1,250 fps	40,800 PSI

C = Compressed Load; L = Lead Projectile

PISTOL

327 Federal Magnum				Case: Federal Twist: 1:16" Primer: Federal 200			Barrel length: 5" Trim length: 1.200"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
115 GR. MEI LRNFP	AS30N	.312"	1.460"	3.0	913 fps	26,600 PSI	3.7	1,017 fps	39,500 PSI
	Trail Boss	.312"	1.460"	2.5	733 fps	15,200 PSI	3.0	804 fps	19,600 PSI
	AP70N	.312"	1.460"	4.2	1,059 fps	25,200 PSI	5.0	1,184 fps	40,200 PSI
380 Auto (9mm Kurz)				Case: Remington Twist: 1:16" Primer: CCI 500			Barrel length: 3.75" Trim length: 0.675"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR.	AP50N	-	-	-	-	-	3.0	800 fps	-
90 GR. HDY JHP	AP70N	.355"	0.955"	3.2	815 fps	10,700 CUP	3.6	955 fps	15,700 CUP
90 GR.	AP100	-	-	-	-	-	5.1	850 fps	-
95 GR. SPR FMJ	AP70N	.355"	0.970"	3.1	814 fps	12,500 CUP	3.5	901 fps	15,500 CUP
100 GR.	AP50N	-	-	-	-	-	2.8	725 fps	-
100 GR. HDY FMJ	AP70N	.355"	0.980"	3.0	721 fps	11,400 CUP	3.4	889 fps	16,100 CUP
100 GR.	AP100	-	-	-	-	-	4.7	775 fps	-
115 GR.	AP50N	-	-	-	-	-	2.3	725 fps	-
	AP100	-	-	-	-	-	4.4	750 fps	-
38 Short Colt				Case: Starline Twist: 1:16" Primer: Federal 100M			Barrel length: 7.5" Trim length: 0.755"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
93 GR. AA206 LRN	AS30N	.359"	1.005"	1.8	634 fps	7,000 CUP	2.1	778 fps	7,300 CUP
	Trail Boss	.359"	1.005"	1.7	575 fps	-	2.0	674 fps	-
	AP70N	.359"	1.005"	2.9	634 fps	-	3.4	775 fps	-
135 GR. AA202 LFP	AS30N	.358"	1.135"	1.8	648 fps	-	2.1	731 fps	-
	Trail Boss	.358"	1.135"	1.5	490 fps	-	1.7	526 fps	-
	AP70N	.358"	1.135"	2.4	624 fps	-	2.8	771 fps	-
38 Long Colt				Case: Starline Twist: 1:16" Primer: Federal 100M			Barrel length: 7.5" Trim length: 1.012"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. LRN	AS30N	.358"	1.400"	2.0	631 fps	-	2.5	765 fps	-
	Trail Boss	.358"	1.400"	2.0	622 fps	-	2.4	705 fps	-
	AP70N	.358"	1.400"	3.2	626 fps	-	3.7	772 fps	-
150 GR. LRN	AS30N	.358"	1.390"	2.0	624 fps	-	2.6	744 fps	-
	Trail Boss	.358"	1.390"	1.8	541 fps	-	2.0	575 fps	-
	AP70N	.358"	1.390"	3.0	631 fps	-	3.5	769 fps	-

PISTOL

9mm Luger				Case: Winchester			Barrel length: 4"		
				Twist: 1:10"			Trim length: 0.750"		
				Primer: CCI 500					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
80 GR. BAR TAC-XP	AP70N	.355"	1.025"	3.7	1,156 fps	31,400 PSI	3.9	1,166 fps	31,500 PSI
90 GR. SPR GDHP	AP70N	.355"	1.010"	5.0	1,170 fps	25,700 CUP	5.5	1,266 fps	30,100 CUP
95 GR. SIE FMJ	AP70N	.355"	1.020"	4.6	1,182 fps	26,800 CUP	5.2	1,292 fps	31,700 CUP
100 GR. SFIRE	AP70N	.355"	1.140"	3.8	1,057 fps	21,700 PSI	4.2	1,169 fps	30,700 PSI
100 GR. SPR FMJ	AP70N	.355"	1.050"	4.8	1,119 fps	27,200 CUP	5.3	1,212 fps	31,500 CUP
115 GR. LRN	AS30N	.356"	1.100"	3.0	954 fps	25,300 CUP	3.4	1,039 fps	31,000 CUP
	AP50N	.356"	1.169"	3.0	920 fps	14,900 PSI	4.0	1,110 fps	34,300 PSI
	AP70N	.356"	1.100"	4.0	1,034 fps	24,400 CUP	4.5	1,124 fps	31,300 CUP
	AP100	.356"	1.169"	5.5	1,055 fps	18,100 PSI	6.8	1,285 fps	33,900 PSI
115 GR. SPR GDHP	AS30N	.355"	1.125"	3.7	1,066 fps	30,900 CUP	3.9	1,095 fps	32,600 CUP
	AP70N	.355"	1.125"	4.5	1,029 fps	27,400 CUP	5.0	1,149 fps	31,200 CUP
120 GR. CAST LRN	AP50N	.355"	1.113"	3.0	970 fps	26,500 PSI	3.5	1,075 fps	34,800 PSI
	AP100	.355"	1.113"	5.0	1,000 fps	23,000 PSI	6.0	1,180 fps	33,200 PSI
125 GR. LCN	AS30N	.356"	1.125"	2.9	899 fps	22,700 CUP	3.3	993 fps	30,900 CUP
	AP70N	.356"	1.125"	3.8	993 fps	24,400 CUP	4.3	1,096 fps	31,300 CUP
125 GR. CAST LCN	AP50N	.355"	1.114"	2.5	835 fps	19,500 PSI	3.2	1,000 fps	32,500 PSI
	AP100	.355"	1.114"	5.0	890 fps	17,300 PSI	6.2	1,135 fps	33,500 PSI
125 GR. SIE FMJ	AS30N	.355"	1.090"	3.5	1,010 fps	28,000 CUP	3.7	1,056 fps	32,500 CUP
	AP70N	.355"	1.090"	4.3	1,031 fps	26,900 CUP	4.9	1,118 fps	30,600 CUP
125 GR. HDY HAP	AP70N	.355"	1.069"	3.0	803 fps	26,800 PSI	3.3	892 fps	32,200 PSI
130 GR. BERB RN	AS30N	.356"	1.150"	2.7	755 fps	27,400 PSI	3.0	853 fps	31,700 PSI
	AP70N	.356"	1.150"	3.8	857 fps	26,600 PSI	4.2	978 fps	31,500 PSI
135 GR. CAST LRN	AP50N	.355"	1.168"	2.3	710 fps	13,100 PSI	3.3	955 fps	34,100 PSI
	AP100	.355"	1.168"	5.2	970 fps	25,100 PSI	6.0	1,100 fps	34,100 PSI
147 GR. HDY XTP	AP70N	.355"	1.100"	3.0	803 fps	24,100 CUP	3.3	869 fps	31,000 CUP
38 ACP				Case:			Barrel length: 3.75"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. LEAD	AP70N	-	-	-	-	-	3.6	955 fps	-
95 GR. LEAD	AP70N	-	-	-	-	-	3.5	900 fps	-
100 GR. LEAD	AP70N	-	-	-	-	-	3.4	890 fps	-

PISTOL

38 Super Auto				Case: Remington Twist: 1:16" Primer: Remington 1 1/2			Barrel length: 5" Trim length: 0.895"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SIE JHP	AP70N	.355"	1.180"	5.7	1,312 fps	26,200 CUP	6.3	1,352 fps	31,600 CUP
100 GR. SPR JHP	AP70N	.355"	1.215"	5.4	1,233 fps	25,200 CUP	6.0	1,327 fps	32,500 CUP
115 GR. CAST LRN	AS30N	.356"	1.250"	4.0	1,046 fps	28,600 CUP	4.6	1,104 fps	31,600 CUP
115 GR. CAST LRN *	AP50N	.356"	1.205"	-	-	-	4.8	1,190 fps	36,200 PSI
115 GR. CAST LRN	AP70N	.356"	1.250"	5.0	1,115 fps	21,900 CUP	5.7	1,216 fps	31,900 CUP
115 GR. CAST LRN *	AP100	.356"	1.205"	6.0	1,010 fps	19,600 PSI	8.0	1,425 fps	34,500 PSI
115 GR. HDY XTP	AP70N	.355"	1.245"	4.9	1,141 fps	25,300 CUP	5.5	1,225 fps	32,300 CUP
125 GR. CAST LCN	AS30N	.356"	1.230"	3.9	1,014 fps	27,300 CUP	4.4	1,063 fps	31,600 CUP
125 GR. CAST LCN *	AP50N	.355"	1.363"	4.0	1,046 fps	28,900 PSI	4.5	1,128 fps	36,500 PSI
125 GR. CAST LCN	AP70N	.356"	1.230"	4.7	1,110 fps	25,200 CUP	5.3	1,171 fps	32,300 CUP
125 GR. CAST LCN *	AP100	.355"	1.363"	7.0	1,260 fps	23,200 PSI	8.0	1,415 fps	36,500 PSI
125 GR. SIE FMJ	AP70N	.355"	1.275"	4.9	1,069 fps	27,600 CUP	5.5	1,179 fps	32,300 CUP
130 GR. BERB RN	AP70N	.355"	1.270"	4.4	984 fps	23,000 CUP	4.9	1,073 fps	30,500 CUP
135 GR. CAST LRN	AS30N	.356"	1.275"	3.5	928 fps	25,600 CUP	4.2	998 fps	32,500 CUP
135 GR. CAST LRN *	AP50N	.355"	1.256"	3.5	925 fps	21,600 PSI	4.4	1,070 fps	36,400 PSI
135 GR. CAST LRN	AP70N	.356"	1.275"	4.5	1,011 fps	22,800 CUP	5.1	1,108 fps	30,900 CUP
135 GR. CAST LRN *	AP100	.355"	1.256"	6.0	1,055 fps	23,800 PSI	7.5	1,325 fps	36,300 PSI
147 GR. HDY XTP	AP70N	.355"	1.260"	4.3	960 fps	26,900 CUP	4.8	1,017 fps	32,500 CUP
150 GR. CAST LRN	AP70N	.356"	1.230"	4.5	1,038 fps	27,600 CUP	5.0	1,111 fps	32,000 CUP
150 GR. SIE JFP	AP70N	.356"	1.265"	4.4	984 fps	26,600 CUP	4.9	1,059 fps	32,100 CUP
* Winchester case									
38 Smith & Wesson				Case: Winchester Twist: 1:18.75" Primer: Winchester SP			Barrel length: 4" Trim length: 0.765"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR.	AP50N	-	-	-	-	-	3.5	1,000 fps	-
	AP70N	-	-	-	-	-	4.1	1,000 fps	-
125 GR.	AP50N	-	-	-	-	-	3.4	950 fps	-
	AP70N	-	-	-	-	-	4.0	950 fps	-
148 GR. LEAD	AP50N	-	-	-	-	-	2.9	750 fps	-
	AP70N	-	-	-	-	-	3.4	750 fps	-
	AP100	-	-	-	-	-	4.3	750 fps	-
158 GR. LEAD	AP50N	-	-	-	-	-	2.8	700 fps	-
	AP70N	-	-	-	-	-	3.3	700 fps	-
	AP100	-	-	-	-	-	4.1	700 fps	-

PISTOL

38 Special	Case: Winchester	Barrel length: 7.7"
	Twist: 1:18.75"	Trim length: 1.145"
	Primer: Winchester SP	

NOTE: See Single Action Pistol section for more loads with lead bullets.

				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY XTP	AS30N	.357"	1.455"	4.0	1,002 fps	14,400 CUP	4.2	1,073 fps	17,000 CUP
	AP70N	.357"	1.455"	5.0	968 fps	11,800 CUP	5.6	1,143 fps	16,700 CUP
125 GR. CAST LRN	AP50N	.356"	1.270"	4.0	905 fps	7,900 PSI	5.0	1,130 fps	11,100 PSI
125 GR. HDY XTP	AS30N	.357"	1.455"	3.5	843 fps	12,400 CUP	3.9	937 fps	16,100 CUP
	AP70N	.357"	1.455"	4.7	918 fps	12,600 CUP	5.2	1,019 fps	17,000 CUP
135 GR. CAST LWC *	AP50N	.358"	1.278"	2.8	645 fps	9,450 PSI	3.5	845 fps	16,900 PSI
	AP70N	.358"	1.278"	3.5	575 fps	8,200 PSI	4.7	940 fps	17,000 PSI
138 GR. CAST LWC *	AP50N	.357"	1.280"	3.0	710 fps	10,100 PSI	3.5	835 fps	17,500 PSI
140 GR. HDY XTP	AS30N	.357"	1.455"	3.0	703 fps	13,400 CUP	3.7	869 fps	16,700 CUP
	AP70N	.357"	1.455"	4.3	832 fps	12,400 CUP	4.8	939 fps	15,400 CUP
146 GR. SPR JHP	AP70N	.357"	1.370"	4.0	788 fps	11,100 CUP	4.5	933 fps	16,100 CUP
	AR2205	.357"	1.370"	9.6	908 fps	12,600 CUP	10.7	979 fps	15,700 CUP
148 GR. CAST LWC *	AP50N	.358"	1.293"	2.8	650 fps	10,100 PSI	3.2	755 fps	13,000 PSI
	AP70N	.358"	1.293"	3.5	585 fps	8,800 PSI	4.5	845 fps	14,700 PSI
148 GR. HDY LHBWC	AS30N	.358"	1.160"	2.3	784 fps	10,900 CUP	2.5	836 fps	13,200 CUP
	Trail Boss	.358"	1.160"	2.0	625 fps	15,100 PSI	2.3	675 fps	15,700 PSI
	AP70N	.358"	1.160"	2.9	709 fps	7,400 CUP	3.8	940 fps	15,600 CUP
158 GR. CAST LSWC *	AP50N	.358"	1.470"	3.2	660 fps	8,200 PSI	3.8	800 fps	16,600 PSI
	AP70N	.358"	1.470"	4.2	645 fps	7,300 PSI	5.0	865 fps	16,300 PSI
158 GR. CAST LSWC	AR2205	.358"	1.475"	9.0	887 fps	12,100 CUP	10.0	983 fps	15,700 CUP
158 GR. HDY XTP	AS30N	.357"	1.455"	3.0	633 fps	13,400 CUP	3.1	721 fps	16,600 CUP
	AP70N	.357"	1.455"	4.0	678 fps	12,600 CUP	4.4	778 fps	16,200 CUP
	AR2205	.357"	1.455"	9.0	769 fps	12,400 CUP	10.0	864 fps	15,500 CUP
170 GR. SIE JHC	AP70N	.357"	1.450"	3.8	744 fps	14,100 CUP	4.2	823 fps	16,100 CUP
	AR2205	.357"	1.450"	8.8	762 fps	12,900 CUP	9.8	888 fps	15,900 CUP

* 4" Vented Barrel

38 Special +P	Case: Winchester	Barrel length: 7.7"
	Twist: 1:18.75"	Trim length: 1.145"
	Primer: Winchester SP	

WARNING: 38 Special +P Loads are for use in modern arms (not aluminium frame) in good condition.

				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY XTP	AP70N	.357"	1.455"	-	-	-	6.0	1,204 fps	18,700 CUP
125 GR. HDY XTP	AP70N	.357"	1.455"	-	-	-	5.4	1,072 fps	18,900 CUP
140 GR. HDY XTP	AP70N	.357"	1.455"	-	-	-	5.1	1,022 fps	19,100 CUP
	AR2205	.357"	1.455"	-	-	-	12.4	1,121 fps	19,400 CUP
146 GR. SPR JHP	AP70N	.357"	1.370"	-	-	-	4.7	987 fps	18,100 CUP
	AR2205	.357"	1.370"	-	-	-	12.0	1,085 fps	18,400 CUP
158 GR. HDY XTP	AP70N	.357"	1.455"	-	-	-	4.7	837 fps	19,200 CUP
	AR2205	.357"	1.455"	-	-	-	11.0	964 fps	17,600 CUP
170 GR. SIE JHC	AP70N	.357"	1.450"	-	-	-	4.3	847 fps	18,600 CUP
	AR2205	.357"	1.450"	-	-	-	10.6	950 fps	17,600 CUP

PISTOL

357 SIG				Case: Federal Twist: 1:16" Primer: Winchester SP			Barrel length: 4" Trim length: 0.860"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. HDY XTP	AP70N	.355"	1.135"	7.2	1,428 fps	27,000 PSI	8.1	1,578 fps	36,900 PSI
115 GR. HDY XTP	AP70N	.355"	1.135"	6.5	1,272 fps	31,600 PSI	7.3	1,375 fps	39,200 PSI
124 GR. HDY XTP	AP70N	.355"	1.135"	5.2	1,134 fps	27,500 PSI	5.8	1,235 fps	38,500 PSI
147 GR. HDY XTP	AP70N	.355"	1.140"	5.0	1,026 fps	29,200 PSI	5.6	1,110 fps	38,600 PSI
357 Magnum				Case: Winchester Twist: 1:18.75" Primer: Winchester SPM			Barrel length: 10" Trim length: 1.285"		
NOTE: See Single Action Pistol section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY XTP	AP70N	.357"	1.590"	7.5	1,465 fps	35,100 CUP	8.0	1,536 fps	40,000 CUP
	AR2205	.357"	1.590"	18.9	1,774 fps	29,600 CUP	21.0	1,900 fps	35,500 CUP
125 GR. HDY XTP	AP70N	.357"	1.590"	7.1	1,394 fps	34,900 CUP	7.6	1,453 fps	39,600 CUP
125 GR. HDY XTP *	AP100	.357"	1.590"	-	-	-	10.3	1,270 fps	33,200 PSI
125 GR. HDY XTP	AR2205	.357"	1.590"	18.0	1,692 fps	34,400 CUP	20.0	1,839 fps	42,000 CUP
138 GR. CAST LWC *	AP50N	.357"	1.420"	4.0	855 fps	13,700 PSI	5.0	1,050 fps	33,700 PSI
140 GR. HDY XTP	AP70N	.357"	1.590"	6.5	1,218 fps	34,800 CUP	7.0	1,299 fps	40,200 CUP
140 GR. HDY FTX	AP70N	.357"	1.600"	4.0	922 fps	19,700 PSI	5.3	1,205 fps	34,200 PSI
140 GR. HDY XTP	AR2205	.357"	1.590"	16.2	1,541 fps	33,100 CUP	18.0	1,685 fps	42,600 CUP
146 GR. SPR JHP	AP70N	.357"	1.535"	6.0	1,160 fps	33,500 CUP	6.5	1,261 fps	39,900 CUP
	AR2205	.357"	1.535"	14.5	1,440 fps	34,300 CUP	16.0	1,566 fps	42,700 CUP
148 GR. CAST LWC *	AP50N	.358"	1.410"	4.0	835 fps	12,700 PSI	5.0	1,005 fps	28,500 PSI
148 GR. HDY LHBWC	AP70N	.358"	1.290"	3.5	880 fps	13,700 CUP	4.0	989 fps	17,700 CUP
150 GR. CAST LSWC *	AP50N	.358"	1.615"	4.0	800 fps	13,300 PSI	5.0	960 fps	23,900 PSI
158 GR. HDY XTP	AP70N	.357"	1.580"	5.8	1,026 fps	32,100 CUP	6.3	1,133 fps	39,300 CUP
158 GR. HDY XTP *	AP100	.357"	1.593"	8.7	1,065 fps	28,200 PSI	9.0	1,075 fps	34,100 PSI
158 GR. HDY XTP	AR2205	.357"	1.580"	14.5	1,402 fps	34,600 CUP	16.0	1,520 fps	42,600 CUP
170 GR. SIE JHC	AR2205	.357"	1.580"	13.0	1,272 fps	32,300 CUP	14.5	1,395 fps	41,200 CUP
180 GR. SPR TMJ *	AP100	.357"	1.700"	7.0	770 fps	16,400 PSI	8.2	965 fps	34,200 PSI
180 GR. NOS PART	AR2205	.357"	1.575"	12.7	1,247 fps	36,900 CUP	13.7	1,308 fps	40,900 CUP
* 4" Vented Barrel									
357-44 Bain & Davis				Case: Federal Twist: 1:14" Primer: Federal 150			Barrel length: 10" Trim length: 1.270"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY JHP	AR2205	.357"	1.580"	23.0	1,680 fps	-	24.0	1,750 fps	-
125 GR. SIE JSP	AR2205	.357"	1.580"	22.0	1,564 fps	-	23.0	1,627 fps	-
140 GR. SPR JHP	AR2205	.357"	1.580"	21.0	1,514 fps	-	22.0	1,596 fps	-
150 GR. NOS SP	AR2205	.357"	1.580"	20.0	1,434 fps	-	21.0	1,557 fps	-
158 GR. HDY XTP	AR2205	.357"	1.580"	19.0	1,367 fps	-	20.0	1,440 fps	-

PISTOL

357 Remington Maximum				Case: Remington Twist: 1:18.75" Primer: Remington 7 1/2			Barrel length: 10" Trim length: 1.600"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY XTP	AR2205	.357"	1.910"	26.0	2,120 fps	-	28.0	2,314 fps	-
125 GR. SPR JSP	AR2205	.357"	1.885"	25.0	1,968 fps	-	27.0	2,126 fps	-
140 GR. SPR JHP	AR2205	.357"	1.890"	22.0	1,866 fps	-	24.0	1,985 fps	-
150 GR. NOS SP	AR2205	.357"	1.890"	21.0	1,788 fps	-	23.0	1,923 fps	-
160 GR. HDY JTC SIL	AR2205	.357"	1.890"	20.5	1,709 fps	-	22.5	1,814 fps	-
170 GR. SIE JHC	AR2205	.357"	1.880"	19.0	1,638 fps	-	21.0	1,748 fps	-
180 GR. SPR TMJ SIL	AR2205	.357"	1.990"	18.0	1,551 fps	-	20.0	1,645 fps	-
200 GR. SPR TMJ SIL	AR2205	.357"	1.990"	16.0	1,280 fps	-	18.0	1,440 fps	-
35 Remington				Case: Remington Twist: 1:16" Primer: Remington 9 1/2			Barrel length: 14" Trim length: 1.910"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SPR FN	AR2207	.358"	2.470"	28.0	1,794 fps	28,600 CUP	32.0	1,977 fps	33,000 CUP
	AR2219	.358"	2.470"	31.0	1,730 fps	28,200 CUP	35.0	1,915 fps	33,100 CUP
	Bench Mark 2	.358"	2.470"	32.5	1,697 fps	29,300 CUP	35.5	1,932 fps	32,300 CUP
	AR2206H	.358"	2.470"	35.0	1,812 fps	27,500 CUP	39.0	2,031 fps	33,100 CUP
	AR2208	.358"	2.470"	37.0	1,795 fps	27,200 CUP	40.5	1,998 fps	32,500 CUP
200 GR. HDY RN	AR2207	.358"	2.510"	27.0	1,525 fps	26,700 CUP	30.5	1,680 fps	31,700 CUP
	AR2219	.358"	2.510"	31.0	1,567 fps	28,500 CUP	33.8	1,670 fps	33,100 CUP
	Bench Mark 2	.358"	2.510"	32.5	1,551 fps	29,400 CUP	35.5	1,766 fps	32,600 CUP
	AR2206H	.358"	2.510"	35.0	1,613 fps	26,100 CUP	38.5	1,772 fps	32,300 CUP
	AR2208	.358"	2.510"	36.0	1,651 fps	28,800 CUP	39.5	1,797 fps	33,300 CUP
220 GR. SPR FN	AR2207	.358"	2.470"	26.0	1,500 fps	30,400 CUP	29.0	1,606 fps	33,400 CUP
	AR2219	.358"	2.470"	29.0	1,455 fps	26,100 CUP	32.5	1,608 fps	32,600 CUP
	Bench Mark 2	.358"	2.470"	31.0	1,484 fps	30,600 CUP	34.0	1,697 fps	33,300 CUP
	AR2206H	.358"	2.470"	33.0	1,589 fps	29,000 CUP	36.3	1,729 fps	33,600 CUP
	AR2208	.358"	2.470"	34.0	1,550 fps	27,800 CUP	38.0	1,718 fps	33,300 CUP
9 x 18mm Makarov				Case: Winchester Twist: 1:10" Primer: Winchester SP			Barrel length: 4" Trim length: 0.708"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SPR FP	AP70N	.364"	0.970"	3.5	885 fps	17,900 PSI	3.9	1,022 fps	23,000 PSI
95 GR. HDY XTP	AP70N	.364"	0.965"	3.6	923 fps	20,100 PSI	4.0	1,030 fps	23,800 PSI

PISTOL

375 Super Mag				Case: Starline Twist: 1:18.75" Primer: Federal 150			Barrel length: 8" Trim length: 1.590"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
220 GR. HDY FP	AR2205	.375"	2.080"	18.0	1,232 fps	-	21.0	1,314 fps	-
375 JDJ				Case: Remington (reformed) Twist: 1:12" Primer: Federal 210M			Barrel length: 14" Trim length: 2.230"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. SIE FP	AR2219	.375"	2.750"	45.0	1,811 fps	-	50.0	2,077 fps	-
	AR2206H	.375"	2.750"	47.0	1,971 fps	-	52.0	2,147 fps	-
220 GR. HDY FP	AR2207	.375"	2.750"	39.0	1,904 fps	-	44.0	2,115 fps	-
	AR2206H	.375"	2.750"	46.0	1,966 fps	-	51.0	2,214 fps	-
270 GR. HDY SP	AR2219	.375"	2.975"	40.0	1,612 fps	-	45.0	1,849 fps	-
	AR2206H	.375"	2.975"	43.0	1,660 fps	-	48.0	1,954 fps	-
300 GR. HDY RN	AR2219	.375"	2.970"	37.0	1,539 fps	-	42.0	1,773 fps	-
	AR2206H	.375"	2.970"	41.0	1,684 fps	-	46.0	1,951 fps	-
40 Smith & Wesson				Case: Hornady Twist: 1:16" Primer: Winchester SP			Barrel length: 4" Trim length: 0.845"		
WARNING: This data is intended for use in firearms with barrels that fully support the cartridge in the chamber. Use of this data in firearms that do not fully support the cartridge may result in bulged cases, ruptured cases, case head separation or other condition that could cause damage to the firearm and/or injury to the shooter and/or bystanders.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. SFIRE	AP70N	.400"	1.120"	4.7	1,059 fps	23,500 PSI	5.3	1,172 fps	32,300 PSI
135 GR. NOS JHP	AS30N	.400"	1.125"	4.0	940 fps	22,600 PSI	4.5	1,071 fps	32,900 PSI
	AP70N	.400"	1.125"	6.2	1,109 fps	22,000 PSI	6.8	1,250 fps	32,000 PSI
140 GR. CAST LRN *	AP50N	.401"	1.075"	3.5	905 fps	17,900 PSI	4.7	1,110 fps	34,800 PSI
	AP70N	.401"	1.075"	4.5	920 fps	16,500 PSI	5.9	1,205 fps	34,900 PSI
140 GR. BAR TAC-XP	AS30N	.400"	1.135"	2.6	713 fps	24,800 PSI	3.0	783 fps	31,900 PSI
	AP70N	.400"	1.135"	4.3	958 fps	23,100 PSI	4.8	1,070 fps	31,200 PSI
150 GR. NOS JHP	AS30N	.400"	1.125"	3.8	923 fps	28,400 PSI	4.0	960 fps	31,700 PSI
	AP70N	.400"	1.125"	5.4	1,066 fps	25,700 PSI	5.9	1,165 fps	32,900 PSI
155 GR. CAST LRN †	AP50N	.401"	1.100"	4.0	915 fps	20,000 PSI	4.6	1,015 fps	33,600 PSI
	AP70N	.401"	1.100"	5.0	970 fps	19,200 PSI	5.6	1,100 fps	33,500 PSI
	AP100	.401"	1.100"	7.5	1,080 fps	25,700 PSI	8.1	1,180 fps	34,000 PSI
155 GR. BERB FP	AS30N	.400"	1.125"	3.7	879 fps	23,500 PSI	4.1	959 fps	31,300 PSI
	AP70N	.400"	1.125"	5.5	1,049 fps	26,000 PSI	6.0	1,145 fps	33,500 PSI
155 GR. HDY XTP	AS30N	.400"	1.125"	3.6	854 fps	23,300 PSI	4.0	942 fps	30,900 PSI
	AP70N	.400"	1.125"	5.7	1,056 fps	23,900 PSI	6.2	1,138 fps	31,800 PSI
165 GR. BERB FP	AS30N	.400"	1.125"	3.4	829 fps	27,500 PSI	3.7	888 fps	32,000 PSI
	AP70N	.400"	1.125"	4.8	951 fps	24,200 PSI	5.4	1,051 fps	30,500 PSI
165 GR. SIE JHP	AS30N	.400"	1.125"	3.5	851 fps	29,900 PSI	3.9	897 fps	33,300 PSI
	AP70N	.400"	1.125"	5.1	976 fps	26,800 PSI	5.6	1,061 fps	32,900 PSI
170 GR. TAIPAN LRN †	AP50N	.401"	1.100"	3.3	790 fps	17,600 PSI	3.8	895 fps	31,900 PSI
	AP70N	.401"	1.100"	4.0	850 fps	17,000 PSI	4.8	1,005 fps	35,000 PSI

PISTOL

40 Smith & Wesson	Case: Hornady	Barrel length: 4"
	Twist: 1:16"	Trim length: 0.845"
	Primer: Winchester SP	

WARNING: This data is intended for use in firearms with barrels that fully support the cartridge in the chamber. Use of this data in firearms that do not fully support the cartridge may result in bulged cases, ruptured cases, case head separation or other condition that could cause damage to the firearm and/or injury to the shooter and/or bystanders.

				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AP100	.401"	1.100"	6.0	920 fps	22,450 PSI	6.8	1,060 fps	35,000 PSI
180 GR. BERB FP	AS30N	.400"	1.125"	3.0	732 fps	25,400 PSI	3.4	809 fps	32,100 PSI
180 GR. CAST LCN *	AP50N	.401"	1.097"	2.8	775 fps	20,500 PSI	3.4	885 fps	31,900 PSI
	AP70N	.401"	1.097"	3.5	790 fps	18,600 PSI	4.5	985 fps	35,000 PSI
180 GR. BERB FP	AP70N	.400"	1.125"	4.6	925 fps	28,300 PSI	5.1	1,002 fps	33,100 PSI
180 GR. CAST LCN *	AP100	.401"	1.097"	5.0	820 fps	16,900 PSI	6.5	1,050 fps	34,900 PSI
180 GR. HDY XTP	AS30N	.400"	1.125"	3.0	727 fps	26,000 PSI	3.5	847 fps	34,300 PSI
	AP70N	.400"	1.125"	5.0	973 fps	26,500 PSI	5.8	1,046 fps	33,400 PSI
200 GR. HDY XTP	AP70N	.400"	1.125"	4.0	824 fps	25,000 PSI	4.7	903 fps	33,600 PSI

* Winchester case

† Fiocchi case

10mm Auto				Case: Winchester			Barrel length: 5"		
				Twist: 1:16"			Trim length: 0.987"		
				Primer: Winchester LP					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
135 GR. NOS JHP	AP70N	.400"	1.250"	7.0	1,284 fps	30,200 PSI	8.0	1,416 fps	36,100 PSI
155 GR. HDY XTP	AP70N	.400"	1.260"	6.5	1,135 fps	22,600 PSI	7.5	1,279 fps	35,200 PSI
180 GR. SIE JHC	AP70N	.400"	1.260"	5.4	965 fps	22,300 PSI	6.4	1,122 fps	32,200 PSI
200 GR. HDY FMJ	AP70N	.400"	1.260"	4.9	846 fps	24,300 PSI	5.9	1,015 fps	36,900 PSI

41 Action Express				Case:			Barrel length: 5"		
				Twist: 1:16"			Trim length: 0.861"		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. LEAD	AP70N	.410"	-	-	-	-	6.3	1,125 fps	-
	AP100	.410"	-	-	-	-	9.0	1,200 fps	-
150 GR.	AP70N	.410"	-	-	-	-	6.5	1,025 fps	-
	AP100	.410"	-	-	-	-	9.2	1,075 fps	-
170 GR. LEAD	AP70N	.410"	-	-	-	-	4.9	1,000 fps	-
	AP100	.410"	-	-	-	-	6.5	1,050 fps	-
170 GR.	AP70N	.410"	-	-	-	-	5.1	900 fps	-
	AP100	.410"	-	-	-	-	6.7	925 fps	-
200 GR. LEAD	AP70N	.410"	-	-	-	-	4.4	875 fps	-
	AP100	.410"	-	-	-	-	6.0	925 fps	-

PISTOL

41 Remington Magnum				Case: Remington Twist: 1:18.75" Primer: Winchester LP			Barrel length: 10.125" Trim length: 1.280"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
170 GR. SIE JHC	AP70N	.410"	1.575"	8.0	1,229 fps	21,600 CUP	10.3	1,488 fps	38,700 CUP
	AR2205	.410"	1.575"	22.5	1,582 fps	26,100 CUP	24.9	1,745 fps	35,600 CUP
200 GR. CAST LFP	AS30N	.410"	1.550"	4.0	854 fps	13,400 CUP	5.2	997 fps	21,200 CUP
210 GR. HDY XTP	AP70N	.410"	1.580"	6.9	971 fps	17,700 CUP	8.9	1,243 fps	37,700 CUP
	AR2205	.410"	1.580"	19.3	1,379 fps	28,000 CUP	21.5	1,518 fps	38,000 CUP
215 GR. CAST LFP	AS30N	.410"	1.585"	4.0	825 fps	24,600 CUP	5.2	979 fps	26,700 CUP
	Trail Boss	.410"	1.600"	4.5	752 fps	13,000 CUP	6.5	910 fps	17,100 CUP
220 GR. SPR JSP	AP70N	.410"	1.580"	6.5	921 fps	18,900 CUP	8.5	1,178 fps	38,600 CUP
	AR2205	.410"	1.580"	18.0	1,296 fps	29,700 CUP	20.0	1,433 fps	37,500 CUP
245 GR. CAST LSWC	Trail Boss	.410"	1.630"	3.5	683 fps	12,600 CUP	6.0	834 fps	16,100 CUP
	AP70N	.410"	1.630"	6.3	1,001 fps	21,200 CUP	8.0	1,164 fps	36,000 CUP
	AR2205	.410"	1.630"	18.0	1,272 fps	27,000 CUP	20.0	1,444 fps	37,700 CUP
250 GR. WFNGC	Trail Boss	.410"	1.540"	3.7	611 fps	14,600 CUP	5.0	748 fps	20,300 CUP
	AR2205	.410"	1.540"	17.0	1,302 fps	33,600 CUP	18.4	1,398 fps	39,700 CUP
255 GR. WFNGC	AR2205	.410"	1.660"	18.8	1,378 fps	33,900 CUP	20.0	1,446 fps	38,800 CUP
265 GR. WLNGC	AR2205	.410"	1.710"	18.6	1,366 fps	31,900 CUP	19.8	1,429 fps	35,700 CUP
				Case: Starline Twist: 1:20" Primer: Federal 150M			Barrel length: 8" Trim length: 1.090"		
44 Colt				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
165 GR. LEAD RNFP	AS30N	.430"	1.310"	3.0	705 fps	6,600 CUP	4.2	944 fps	9,000 CUP
	Trail Boss	.430"	1.310"	3.3	698 fps	5,400 CUP	4.5	844 fps	9,700 CUP
185 GR. LEAD RNFP	AS30N	.430"	1.350"	3.0	692 fps	5,800 CUP	4.2	893 fps	9,600 CUP
	Trail Boss	.430"	1.350"	3.2	643 fps	5,600 CUP	4.0	751 fps	9,600 CUP
200 GR. LEAD RNFP	AS30N	.430"	1.370"	3.2	710 fps	6,100 CUP	3.9	831 fps	10,000 CUP
	Trail Boss	.430"	1.370"	3.0	595 fps	4,800 CUP	3.9	711 fps	9,300 CUP
	AP70N	.430"	1.370"	4.8	762 fps	6,100 CUP	5.7	927 fps	9,900 CUP
240 GR. LEAD RNFP	AS30N	.430"	1.380"	4.0	706 fps	6,800 CUP	4.7	818 fps	9,500 CUP
	Trail Boss	.430"	1.380"	3.0	563 fps	6,800 CUP	3.4	625 fps	9,000 CUP
	AP70N	.430"	1.380"	4.5	769 fps	6,400 CUP	5.2	870 fps	10,400 CUP
				Case: Starline Twist: 1:20" Primer: Winchester LP			Barrel length: 8" Trim length: 1.155"		
NOTE: See Single Action Pistol section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. NOS JHP	AP70N	.429"	1.460"	6.0	834 fps	9,000 CUP	6.8	967 fps	12,900 CUP
	AR2205	.429"	1.460"	13.0	848 fps	9,100 CUP	15.0	1,021 fps	13,100 CUP
220 GR. BERB FP	AS30N	.430"	1.460"	3.7	638 fps	7,800 CUP	4.4	774 fps	13,600 CUP
	Trail Boss	.430"	1.460"	4.0	633 fps	7,300 CUP	5.1	766 fps	12,800 CUP
	AP70N	.430"	1.460"	5.7	748 fps	8,700 CUP	6.5	918 fps	13,700 CUP

PISTOL

44 Remington Magnum				Case: Winchester			Barrel length: 8.275"		
				Twist: 1:20"			Trim length: 1.280"		
				Primer: Remington 2 1/2					
NOTE: See Single Action Pistol section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. HDY XTP	AP70N	.430"	1.600"	9.0	1,209 fps	19,000 CUP	11.3	1,463 fps	36,900 CUP
200 GR. NOS JHP	AP70N	.429"	1.600"	10.0	1,303 fps	30,700 CUP	11.1	1,398 fps	38,300 CUP
210 GR. SIE JHC	AP70N	.430"	1.600"	9.0	1,190 fps	26,000 CUP	11.0	1,365 fps	37,600 CUP
220 GR. BERB FP	AP70N	.430"	1.610"	7.3	839 fps	12,200 PSI	9.0	1,104 fps	21,200 PSI
225 GR. SPR JHP	AP70N	.429"	1.575"	8.0	1,041 fps	18,900 CUP	10.5	1,291 fps	37,300 CUP
230 GR. CAST LSWC	AP100	.430"	1.614"	11.0	1,110 fps	18,600 PSI	13.5	1,370 fps	32,900 PSI
240 GR. NOS JHP	AP70N	.429"	1.600"	8.0	1,018 fps	21,900 CUP	10.2	1,246 fps	38,200 CUP
270 GR. SPR GDSP	AP70N	.429"	1.600"	8.5	1,049 fps	32,100 CUP	9.5	1,128 fps	36,700 CUP
280 GR. SFT JHP	AP70N	.430"	1.700"	8.0	917 fps	27,400 CUP	9.7	1,090 fps	38,200 CUP
300 GR. HDY XTP	AP70N	.430"	1.600"	8.0	972 fps	31,200 CUP	9.6	1,113 fps	38,200 CUP
325 GR. BTB LFN GC	AP70N	.430"	1.730"	8.0	942 fps	27,700 CUP	10.0	1,090 fps	38,000 CUP
330 GR. BTB LFN GC	AP70N	.430"	1.730"	8.0	943 fps	27,800 CUP	9.5	1,058 fps	37,000 CUP
355 GR. BTB LFN GC	AP70N	.430"	1.710"	7.8	922 fps	30,700 CUP	8.8	991 fps	37,300 CUP
44 Auto Mag				Case: Federal (reformed)			Barrel length: 6"		
				Twist: 1:18"			Trim length: 1.293"		
				Primer: CCI 350					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SIE JHC	AR2205	.430"	1.610"	25.0	1,316 fps	-	27.0	1,478 fps	-
200 GR. HDY XTP	AR2205	.430"	1.610"	25.0	1,379 fps	-	26.0	1,427 fps	-
225 GR. SPR JHP SWC	AR2205	.429"	1.595"	20.0	1,126 fps	-	22.0	1,269 fps	-
240 GR. NOS HP	AR2205	.429"	1.600"	20.0	1,125 fps	-	21.0	1,183 fps	-
445 Super Mag				Case: Starline			Barrel length: 10"		
				Twist: 1:20"			Trim length: 1.590"		
				Primer: Federal 210					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SIE JHC	AR2205	.430"	1.925"	34.5	1,655 fps	-	37.0	1,901 fps	-
200 GR. BAR X	AR2205	.430"	1.925"	35.0	1,795 fps	-	38.0	1,885 fps	-
225 GR. BAR X	AR2205	.430"	1.925"	34.0	1,708 fps	-	37.5	1,864 fps	-
444 Marlin				Case: Remington			Barrel length: 15"		
				Twist: 1:38"			Trim length: 2.215"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. BAR XFB	AR2207	.429"	2.550"	46.0	2,086 fps	34,400 CUP	51.2C	2,348 fps	42,900 CUP
	AR2219	.429"	2.550"	50.0	1,940 fps	30,200 CUP	52.0C	2,037 fps	33,600 CUP
	Bench Mark 2	.429"	2.550"	50.0	1,940 fps	27,600 CUP	54.0	2,102 fps	35,800 CUP
225 GR. BAR XFB	AR2207	.429"	2.550"	42.2	1,916 fps	32,300 CUP	46.9	2,158 fps	42,300 CUP
	AR2219	.429"	2.550"	47.0	1,846 fps	33,400 CUP	50.0C	1,986 fps	37,000 CUP
	Bench Mark 2	.429"	2.550"	49.0	1,901 fps	34,500 CUP	52.0C	2,044 fps	38,100 CUP
240 GR. SIE JHC	AR2207	.430"	2.535"	44.0	1,969 fps	36,100 CUP	49.2C	2,179 fps	42,100 CUP

C = Compressed Load; L = Lead Projectile

PISTOL

444 Marlin				Case: Remington Twist: 1:38" Primer: Remington 9 1/2			Barrel length: 15" Trim length: 2.215"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2219	.430"	2.535"	49.5	1,900 fps	31,400 CUP	52.0C	2,012 fps	35,900 CUP
	Bench Mark 2	.430"	2.535"	51.0	1,948 fps	31,600 CUP	55.0C	2,093 fps	40,600 CUP
	AR2206H	.430"	2.535"	51.0	1,760 fps	29,600 CUP	53.0C	1,862 fps	33,100 CUP
265 GR. HDY JFP	AR2207	.430"	2.550"	42.0	1,867 fps	31,200 CUP	47.0	2,092 fps	41,100 CUP
	AR2219	.430"	2.550"	47.0	1,803 fps	33,200 CUP	52.0C	2,028 fps	38,300 CUP
	Bench Mark 2	.430"	2.550"	49.0	1,855 fps	31,000 CUP	53.0C	2,004 fps	40,700 CUP
	AR2206H	.430"	2.550"	50.0	1,763 fps	29,300 CUP	53.0C	1,891 fps	34,800 CUP
270 GR. SPR JFP	AR2207	.429"	2.540"	42.0	1,898 fps	34,900 CUP	46.5	2,083 fps	41,400 CUP
	AR2219	.429"	2.540"	47.0	1,823 fps	31,700 CUP	52.0C	2,026 fps	38,100 CUP
	Bench Mark 2	.429"	2.540"	50.0	1,902 fps	33,500 CUP	54.0C	2,041 fps	41,700 CUP
	AR2206H	.429"	2.540"	50.0	1,781 fps	29,300 CUP	53.0C	1,893 fps	33,400 CUP
275 GR. BAR FP	AR2207	.430"	2.520"	40.0	1,866 fps	33,500 CUP	44.5	2,049 fps	41,800 CUP
	AR2219	.430"	2.520"	46.0	1,802 fps	33,800 CUP	51.0C	2,044 fps	43,100 CUP
	Bench Mark 2	.430"	2.520"	48.0	1,866 fps	35,900 CUP	51.0C	1,964 fps	43,300 CUP
	AR2206H	.430"	2.520"	47.0	1,705 fps	27,100 CUP	52.0C	1,941 fps	36,200 CUP
280 GR. SFT HP	AR2207	.430"	2.620"	38.0	1,765 fps	37,300 CUP	42.5	1,977 fps	42,300 CUP
	AR2219	.430"	2.620"	44.5	1,809 fps	33,400 CUP	49.5	1,986 fps	42,400 CUP
	Bench Mark 2	.430"	2.620"	46.0	1,815 fps	38,300 CUP	49.5C	1,941 fps	42,600 CUP
	AR2206H	.430"	2.620"	47.0	1,760 fps	30,300 CUP	52.0C	1,973 fps	37,600 CUP
	AR2208	.430"	2.620"	49.0	1,707 fps	33,000 CUP	52.0C	1,875 fps	36,800 CUP
300 GR. SFT HP	AR2207	.430"	2.620"	38.5	1,816 fps	36,200 CUP	42.5	1,946 fps	42,500 CUP
	AR2219	.430"	2.620"	43.0	1,694 fps	30,600 CUP	48.0	1,905 fps	42,600 CUP
	Bench Mark 2	.430"	2.620"	46.0	1,790 fps	36,200 CUP	48.5	1,893 fps	41,900 CUP
	AR2206H	.430"	2.620"	47.0	1,722 fps	33,600 CUP	50.0C	1,853 fps	35,600 CUP
	AR2208	.430"	2.620"	47.0	1,631 fps	30,700 CUP	50.0C	1,753 fps	35,700 CUP
45 GAP (Glock Auto)				Case: Speer Twist: 1:16" Primer: Winchester SP			Barrel length: 5" Trim length: 0.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
155 GR. LSWC CAST	AS30N	.452"	1.110"	3.9	974 fps	18,000 PSI	4.4	1,047 fps	22,300 PSI
185 GR. HDY XTP	AS30N	.451"	1.060"	3.7	816 fps	18,800 PSI	4.1	881 fps	21,400 PSI
	AP70N	.451"	1.060"	5.5	864 fps	17,700 PSI	6.3	1,027 fps	22,300 PSI
200 GR. SPR GDHP	AS30N	.451"	1.080"	3.3	718 fps	17,300 PSI	3.7	796 fps	20,400 PSI
	AP70N	.451"	1.080"	5.2	838 fps	18,500 PSI	5.7	924 fps	20,900 PSI

PISTOL

45 ACP				Case: Winchester Twist: 1:16" Primer: Federal 150			Barrel length: 5" Trim length: 0.893"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. CAST LSWC	AP50N	.452"	1.210"	4.5	930 fps	12,900 PSI	5.4	1,090 fps	19,200 PSI
	AP100	.452"	1.210"	8.5	970 fps	14,900 PSI	9.5	1,165 fps	20,400 PSI
155 GR. CAST LSWC	AS30N	.451"	1.230"	4.9	1,040 fps	16,100 CUP	5.2	1,082 fps	17,700 CUP
	AP50N	.452"	1.245"	5.0	940 fps	9,200 PSI	6.2	1,175 fps	20,400 PSI
	AP70N	.451"	1.230"	6.5	1,015 fps	13,000 CUP	7.0	1,135 fps	16,700 CUP
155 GR. SFIRE	AP70N	.451"	1.220"	5.4	828 fps	12,300 CUP	6.0	1,050 fps	16,900 CUP
160 GR. BAR TAC-XP	AS30N	.451"	1.200"	3.4	833 fps	17,100 PSI	3.9	906 fps	20,000 PSI
	AP70N	.451"	1.200"	5.4	938 fps	17,100 PSI	5.9	1,047 fps	19,500 PSI
175 GR. CAST LSWC	AP50N	.452"	1.250"	4.5	845 fps	12,000 PSI	5.5	1,020 fps	17,900 PSI
180 GR. LFP	AS30N	.452"	1.140"	3.8	783 fps	11,600 CUP	4.5	910 fps	16,700 CUP
	Trail Boss	.452"	1.140"	3.5	664 fps	7,100 CUP	5.0	852 fps	13,700 CUP
	AP70N	.452"	1.140"	5.3	755 fps	11,100 CUP	6.4	1,019 fps	17,600 CUP
185 GR. CAST LSWC	AP50N	.452"	1.271"	4.5	800 fps	8,000 PSI	5.8	1,030 fps	20,100 PSI
185 GR. HDY JSWC	AS30N	.451"	1.135"	4.5	855 fps	14,500 CUP	4.9	981 fps	17,400 CUP
	AP70N	.451"	1.135"	6.0	908 fps	13,100 CUP	6.4	977 fps	16,800 CUP
200 GR. CAST LSWC	AS30N	.451"	1.225"	3.6	759 fps	11,800 CUP	4.3	888 fps	17,000 CUP
	Trail Boss	.451"	1.225"	3.5	652 fps	9,200 CUP	5.5	816 fps	16,100 CUP
	AP50N	.452"	1.255"	4.0	755 fps	11,100 PSI	5.0	960 fps	21,000 PSI
	AP70N	.451"	1.225"	5.8	889 fps	13,900 CUP	6.3	962 fps	16,800 CUP
200 GR. SPR JHP	AS30N	.451"	1.155"	3.9	714 fps	15,200 CUP	4.3	785 fps	17,700 CUP
	AP70N	.451"	1.155"	5.8	889 fps	15,100 CUP	6.2	949 fps	17,200 CUP
230 GR. CAST LRN	AS30N	.452"	1.200"	3.5	716 fps	13,700 CUP	4.0	793 fps	16,800 CUP
	Trail Boss	.452"	1.200"	3.5	658 fps	11,200 CUP	4.5	761 fps	15,100 CUP
	AP50N	.452"	1.250"	3.8	720 fps	9,700 PSI	4.5	840 fps	18,100 PSI
	AP70N	.452"	1.200"	4.5	703 fps	11,400 CUP	5.4	857 fps	16,800 CUP
230 GR. HDY FMJ FP	AS30N	.451"	1.200"	3.7	670 fps	15,900 CUP	4.0	732 fps	17,000 CUP
	AP70N	.451"	1.200"	5.1	716 fps	11,800 CUP	5.6	844 fps	16,800 CUP

45 SUPER				Case: Winchester Twist: 1:16" Primer: Federal 150			Barrel length: 5" Trim length: 0.893"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
185 GR. HDY JSWC	AP70N	.451"	1.195"	6.0	908 fps	13,100 CUP	7.0	1,067 fps	20,100 CUP
200 GR. SPR JHP	AP70N	.451"	1.155"	5.8	889 fps	15,100 CUP	6.7	1,014 fps	20,100 CUP
230 GR. HDY FMJ FP	AP70N	.451"	1.200"	5.1	716 fps	11,800 CUP	6.0	877 fps	19,400 CUP

PISTOL

45 Colt				Case: Winchester Twist: 1:16" Primer: Winchester LP			Barrel length: 7.26" Trim length: 1.280"		
NOTE: See Single Action Pistol section for more loads.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. HDY XTP	AP70N	.452"	1.600"	8.0	915 fps	9,600 CUP	9.0	1,068 fps	13,900 CUP
225 GR. HDY FTX	AS30N	.452"	1.600"	4.4	538 fps	9,400 PSI	5.5	761 fps	13,600 PS
	AP70N	.452"	1.600"	6.4	684 fps	7,800 PSI	8.2	916 fps	13,200 PSI
250 GR. HDY XTP	AP70N	.452"	1.595"	7.5	705 fps	10,300 CUP	8.5	856 fps	14,000 CUP
260 GR. SPR JHP	AP70N	.451"	1.595"	7.0	661 fps	9,400 CUP	8.0	813 fps	14,000 CUP
300 GR. SIE JFP	AP70N	.452"	1.670"	6.6	593 fps	11,200 CUP	7.3	700 fps	13,700 CUP
45 Colt (Ruger, Freedom Arms & T/C only)				Case: Winchester Twist: 1:16" Primer: Winchester LP			Barrel length: 7.26" Trim length: 1.280"		
WARNING: These loads are intended for Ruger, Freedom Arms and Thompson Contender pistols only. Do not use these loads in other pistols chambered for the 45 Colt.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
240 GR. SIE JHC	AR2205	.452"	1.600"	20.0	1,169 fps	20,100 CUP	26.0	1,413 fps	30,000 CUP
250 GR. HDY XTP	AR2205	.452"	1.600"	20.0	1,150 fps	23,500 CUP	24.6	1,343 fps	30,300 CUP
300 GR. SPR JFP	AR2205	.451"	1.650"	19.0	1,051 fps	23,600 CUP	22.3	1,202 fps	29,900 CUP
325 GR. CPB LFN PB	AR2205	.452"	1.680"	20.0	1,053 fps	22,300 CUP	23.0	1,189 fps	28,000 CUP
335 GR. CPB LFN GC	AR2205	.452"	1.680"	20.0	1,011 fps	21,100 CUP	22.5C	1,155 fps	28,300 CUP
360 GR. CPB LFN GC	AR2205	.452"	1.680"	19.5	1,004 fps	21,100 CUP	22.0C	1,167 fps	29,800 CUP
45 Winchester Magnum				Case: Winchester Twist: 1:16" Primer: CCI 350			Barrel length: 5" Trim length: 1.193"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
230 GR. HDY FMJ FP	AR2205	.451"	1.500"	24.0	1,160 fps	27,400 CUP	25.0	1,259 fps	29,400 CUP
240 GR. SIE JHC	AR2205	.451"	1.555"	24.0	1,164 fps	29,000 CUP	25.0	1,266 fps	33,000 CUP
250 GR. NOS JHP	AR2205	.451"	1.500"	23.0	1,141 fps	34,000 CUP	24.0	1,239 fps	37,100 CUP
260 GR. SPR JHP	AR2205	.451"	1.505"	22.0	1,148 fps	32,600 CUP	23.0	1,209 fps	35,400 CUP
450 Extreme				Case: Starline Twist: 1:24" Primer: CCI 350			Barrel length: 8" Trim length: 1.340"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
240 GR. HDY XTP-MAG.	AR2205	.452"	1.725"	31.0	1,744 fps	40,100 PSI	33.0C	1,827 fps	44,700 PSI
260 GR. HDY XTP-MAG.	AR2205	.452"	1.725"	29.5	1,649 fps	39,600 PSI	30.5	1,722 fps	44,800 PSI
265 GR. CPB LFP/GC	AR2205	.453"	1.670"	29.0	1,651 fps	39,900 PSI	31.0	1,736 fps	44,900 PSI
300 GR. HDY XTP-MAG.	AR2205	.452"	1.725"	25.6	1,465 fps	38,900 PSI	27.3	1,564 fps	45,600 PSI

PISTOL

454 Casull				Case: Freedom Arms Twist: 1:24" Primer: Winchester SR			Barrel length: 9.375" Trim length: 1.380"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
240 GR. SIE JHC	AP70N	.452"	1.680"	10.2	1,212 fps	24,400 CUP	11.5	1,325 fps	37,500 CUP
240 GR. FA JHP	AR2205	.452"	1.765"	29.0	1,512 fps	22,300 CUP	34.0C	1,834 fps	43,300 CUP
250 GR. MEI LRNFP	Trail Boss	.452"	1.680"	6.7	862 fps	14,800 CUP	9.0	1,011 fps	19,300 CUP
250 GR. NOS JHP	AP70N	.451"	1.700"	10.8	1,221 fps	25,700 CUP	12.0	1,290 fps	35,300 CUP
250 GR. BAR X	AR2205	.451"	1.780"	26.0	1,580 fps	40,800 CUP	28.5C	1,685 fps	50,000 CUP
260 GR. SPR JHP	AP70N	.451"	1.675"	10.3	1,157 fps	25,500 CUP	11.5	1,245 fps	34,900 CUP
260 GR. FA JFP	AR2205	.452"	1.765"	28.0	1,421 fps	19,000 CUP	33.0C	1,762 fps	42,100 CUP
265 GR. CPB LFP GC	Trail Boss	.452"	1.700"	7.0	836 fps	18,800 CUP	9.0	984 fps	27,100 CUP
300 GR. CPB LFN GC	Trail Boss	.452"	1.800"	6.5	767 fps	14,900 CUP	8.0	865 fps	23,900 CUP
300 GR. FA JFP	AR2205	.452"	1.775"	27.0	1,541 fps	41,100 CUP	31.0C	1,702 fps	52,400 CUP
325 GR. CPB LFN PB	Trail Boss	.452"	1.760"	5.0	636 fps	13,600 CUP	7.0	798 fps	23,700 CUP
	AR2205	.452"	1.760"	24.7	1,389 fps	30,300 CUP	25.5C	1,452 fps	36,900 CUP
325 GR. SFT HP	AR2205	.451"	1.750"	23.0	1,323 fps	42,600 CUP	25.5	1,460 fps	52,600 CUP
335 GR. CPB LFN GC	Trail Boss	.452"	1.770"	4.8	618 fps	15,500 CUP	6.8	778 fps	25,600 CUP
	AR2205	.452"	1.770"	23.0	1,306 fps	30,000 CUP	25.5	1,460 fps	42,800 CUP
360 GR. CPB LFN GC	Trail Boss	.452"	1.760"	5.0	615 fps	18,000 CUP	6.0	699 fps	27,300 CUP
	AR2205	.452"	1.760"	21.0	1,205 fps	31,000 CUP	24.0	1,406 fps	48,300 CUP
395 GR. CPB LFN GC	Trail Boss	.452"	1.770"	4.0	519 fps	19,200 CUP	5.0	607 fps	23,600 CUP
	AR2205	.452"	1.770"	18.0	1,076 fps	29,600 CUP	21.0	1,269 fps	48,300 CUP
460 S&W MAGNUM				Case: Starline Twist: 1:20" Primer: Winchester LRM			Barrel length: 10.743" Trim length: 1.790"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. BAR XPB	AR2205	.451"	2.320"	41.0	2,077 fps	35,200 PSI	45.5C	2,238 fps	42,200 PSI
225 GR. BAR X	AR2205	.451"	2.110"	37.0	2,007 fps	42,100 PSI	41.0C	2,191 fps	54,400 PSI
240 GR. HDY XTP MAG.	AR2205	.452"	2.160"	40.0	2,018 fps	43,200 PSI	45.0C	2,198 fps	51,800 PSI
250 GR. BAR X	AR2205	.451"	2.200"	36.0	1,938 fps	45,700 PSI	40.0C	2,074 fps	57,200 PSI
260 GR. NOS PART	AR2205	.451"	2.175"	38.0	1,939 fps	45,000 PSI	43.0C	2,098 fps	51,300 PSI
265 GR. SFT HP	AR2205	.451"	2.180"	38.0	1,940 fps	44,800 PSI	43.5C	2,109 fps	53,100 PSI
300 GR. HDY XTP MAG.	AR2205	.452"	2.160"	36.0	1,852 fps	49,000 PSI	40.0C	1,988 fps	57,000 PSI
325 GR. CPB LFN PB	Trail Boss	.452"	2.200"	7.0	734 fps	16,500 PSI	11.0	914 fps	20,400 PSI
	AR2205	.452"	2.200"	34.0	1,790 fps	51,100 PSI	38.0	1,897 fps	56,400 PSI
325 GR. SFT HP	AR2205	.451"	2.175"	33.0	1,716 fps	46,700 PSI	37.0	1,859 fps	57,300 PSI
	AR2207	.451"	2.175"	37.0	1,556 fps	36,200 PSI	41.0C	1,695 fps	42,500 PSI
335 GR. CPB WLN GC	Trail Boss	.452"	2.180"	7.0	726 fps	17,700 PSI	10.0	887 fps	22,200 PSI
	AR2205	.452"	2.180"	33.0	1,719 fps	50,000 PSI	37.5	1,849 fps	55,700 PSI
360 GR. CPB WLN GC	Trail Boss	.452"	2.190"	7.0	712 fps	19,600 PSI	9.0	827 fps	24,200 PSI
	AR2205	.452"	2.190"	31.0	1,632 fps	49,500 PSI	35.5	1,776 fps	56,500 PSI
	AR2207	.452"	2.190"	37.0	1,531 fps	38,200 PSI	40.0C	1,644 fps	43,200 PSI
395 GR. CPB WLN GC	Trail Boss	.452"	2.185"	7.0	695 fps	21,100 PSI	8.0	754 fps	24,000 PSI
	AR2205	.452"	2.185"	28.0	1,516 fps	48,700 PSI	32.0	1,647 fps	56,600 PSI
	AR2207	.452"	2.185"	35.0	1,484 fps	40,000 PSI	38.0C	1,596 fps	46,600 PSI

PISTOL

45-70 Government				Case: Winchester Twist: 1:20" Primer: CCI 200			Barrel length: 15" Trim length: 2.100"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. CAST LFP	AR2207	.458"	2.465"	30.0	1,175 fps	14,400 CUP	35.5	1,418 fps	16,100 CUP
	AR2206H	.458"	2.465"	45.0	1,326 fps	14,400 CUP	51.0	1,464 fps	15,500 CUP
	AR2208	.458"	2.465"	45.0	1,276 fps	17,800 CUP	55.0	1,530 fps	20,600 CUP
300 GR. SIE HP	AR2207	.458"	2.525"	45.0	1,774 fps	16,700 CUP	55.0	2,076 fps	27,600 CUP
	AR2219	.458"	2.525"	54.0	1,699 fps	18,100 CUP	60.0	1,940 fps	28,000 CUP
	AR2206H	.458"	2.525"	58.0	1,654 fps	16,500 CUP	62.0C	1,874 fps	21,000 CUP
	AR2208	.458"	2.525"	57.0	1,512 fps	16,300 CUP	63.0C	1,821 fps	23,800 CUP
385 GR. CAST LFP	AR2207	.458"	2.505"	28.0	1,077 fps	13,300 CUP	32.0	1,249 fps	14,700 CUP
	AR2206H	.458"	2.505"	35.0	1,101 fps	11,900 CUP	42.0	1,301 fps	23,100 CUP
	AR2208	.458"	2.505"	42.5	1,293 fps	15,400 CUP	52.5	1,537 fps	21,800 CUP
405 GR. CAST LFP	AR2207	.458"	2.540"	27.0	1,057 fps	14,200 CUP	31.0	1,224 fps	17,100 CUP
	AR2206H	.458"	2.540"	40.0	1,261 fps	14,900 CUP	48.0	1,453 fps	18,900 CUP
	AR2208	.458"	2.540"	40.0	1,188 fps	15,600 CUP	50.0	1,445 fps	20,900 CUP
485 GR. CAST LFP	AR2207	.458"	2.540"	28.0	1,065 fps	16,400 CUP	32.0	1,233 fps	20,400 CUP
	AR2206H	.458"	2.540"	32.0	1,010 fps	15,600 CUP	39.0	1,209 fps	22,700 CUP
480 Ruger				Case: Hornady Twist: 1:18" Primer: Winchester LP			Barrel length: 7.5" Trim length: 1.275"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
325 GR. HDY XTP	AR2205	.475"	1.620"	24.0	1,295 fps	32,600 PSI	27.2	1,477 fps	45,600 PSI
355 GR. BTB LFN GC	Trail Boss	.476"	1.630"	5.0	621 fps	16,700 PSI	6.5	740 fps	22,700 PSI
370 GR. CPB LFP	Trail Boss	.475"	1.640"	4.5	597 fps	16,000 PSI	5.7	689 fps	20,900 PSI
	AR2205	.475"	1.640"	22.5	1,248 fps	32,800 PSI	26.0C	1,427 fps	45,900 PSI
400 GR. HDY XTP	AR2205	.475"	1.620"	18.0	1,026 fps	31,600 PSI	21.0	1,211 fps	46,100 PSI
405 GR. CPB (w/GCK)	Trail Boss	.475"	1.620"	3.5	469 fps	15,200 PSI	5.5	645 fps	25,700 PSI
	AR2205	.475"	1.620"	19.0	1,112 fps	33,200 PSI	21.7	1,255 fps	45,500 PSI
420 GR. BTB LFN GC	Trail Boss	.476"	1.640"	3.5	467 fps	16,200 PSI	5.0	597 fps	24,300 PSI
	AR2205	.476"	1.640"	19.5	1,125 fps	39,100 PSI	21.3C	1,214 fps	46,400 PSI
475 Linebaugh				Case: Hornady Twist: 1:20" Primer: Winchester LP			Barrel length: 8" Trim length: 1.390"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
325 GR. HDY XTP	AR2205	.475"	1.740"	27.0	1,288 fps	28,000 PSI	31.2	1,546 fps	47,700 PSI
370 GR. CPB LFP	Trail Boss	.475"	1.770"	6.0	661 fps	16,000 PSI	8.5	824 fps	27,500 PSI
	AR2205	.475"	1.770"	25.5	1,259 fps	31,800 PSI	28.5	1,443 fps	47,400 PSI
400 GR. HDY XTP	AR2205	.475"	1.740"	21.0	1,049 fps	28,200 PSI	25.0	1,301 fps	48,800 PSI
405 GR. CPB LFP GC	Trail Boss	.475"	1.745"	5.5	603 fps	19,000 PSI	7.5	732 fps	29,600 PSI
	AR2205	.475"	1.745"	22.0	1,148 fps	32,400 PSI	25.0	1,304 fps	46,200 PSI

PISTOL

50 Action Express				Case: Speer Twist: 1:19" Primer: CCI 350			Barrel length: 6" Trim length: 1.280"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
325 GR. SPR AE UCHP	AR2205	.500"	1.575"	29.0	1,201 fps	-	30.8	1,294 fps	-
500 Linebaugh				Case: Starline Twist: 1:20" Primer: CCI 350			Barrel length: 8" Trim length: 1.400"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
410 GR. LFP	Trail Boss	.511"	1.800"	8.5	752 fps	15,400 PSI	10.0	815 fps	17,400 PSI
	AR2205	.511"	1.800"	32.0	1,294 fps	30,400 PSI	33.7	1,369 fps	34,800 PSI
425 GR. LFP (w/GCK)	Trail Boss	.511"	1.800"	7.5	664 fps	13,100 PSI	9.5	768 fps	16,400 PSI
	AR2205	.511"	1.800"	30.0	1,244 fps	29,400 PSI	32.0	1,356 fps	35,200 PSI
450 GR. MT. BAL LWSC	Trail Boss	.512"	1.840"	9.2	759 fps	19,700 PSI	10.0	800 fps	25,000 PSI
468 GR. LFP	Trail Boss	.511"	1.800"	7.3	640 fps	14,400 PSI	9.2	730 fps	18,100 PSI
	AR2205	.511"	1.800"	28.5	1,209 fps	29,300 PSI	30.5	1,297 fps	35,000 PSI
500 Wyoming Express				Case: Freedom Arms Twist: 1:20" Primer: Federal 210			Barrel length: 9" Trim length: 1.360"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
350 GR. HDY XTP	AR2205	.500"	1.740"	31.0	1,378 fps	32,400 PSI	35.0C	1,584 fps	44,200 PSI
370 GR. CPB LGC	Trail Boss	.500"	1.740"	7.0	698 fps	19,100 PSI	10.0	859 fps	23,800 PSI
	AR2205	.500"	1.740"	31.0	1,382 fps	33,600 PSI	34.0C	1,535 fps	43,300 PSI
400 GR. CPB LGC	Trail Boss	.500"	1.750"	8.0	738 fps	23,200 PSI	10.0	842 fps	28,000 PSI
	AR2205	.500"	1.750"	30.0	1,390 fps	39,900 PSI	33.0	1,509 fps	46,700 PSI
420 GR. BLT MTN PB	AR2205	.500"	1.765"	23.0	1,038 fps	28,700 PSI	27.0C	1,274 fps	31,600 PSI
440 GR. CPB LGC	Trail Boss	.500"	1.740"	6.0	600 fps	20,100 PSI	8.0	717 fps	24,800 PSI
	AR2205	.500"	1.740"	26.0	1,220 fps	34,400 PSI	30.0C	1,413 fps	48,300 PSI
500 S&W Magnum				Case: Starline Twist: 1:18" Primer: Winchester LR			Barrel length: 10" Trim length: 1.615"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
275 GR. BAR XPB	AR2205	.500"	2.085"	40.0	1,891 fps	41,000 PSI	44.0	2,047 fps	48,400 PSI
325 GR. BAR XPB	AR2205	.500"	2.290"	40.0	1,788 fps	40,700 PSI	43.0	1,920 fps	49,200 PSI
350 GR. HDY XTP	AR2205	.500"	1.985"	38.0	1,675 fps	41,400 PSI	42.5	1,863 fps	49,900 PSI
370 GR. CPB LGC	Trail Boss	.500"	2.020"	8.0	746 fps	13,500 PSI	12.0	926 fps	19,000 PSI
	AR2205	.500"	2.020"	40.0	1,688 fps	38,700 PSI	42.0	1,784 fps	48,900 PSI
375 GR. BAR XPB	AR2205	.500"	2.290"	33.0	1,550 fps	38,000 PSI	36.8	1,717 fps	50,500 PSI
385 GR. REM. HP	AR2205	.500"	2.150"	37.0	1,644 fps	41,900 PSI	41.0	1,788 fps	51,800 PSI
400 GR. SIE JSP	AR2205	.500"	2.050"	36.5	1,585 fps	42,000 PSI	39.5	1,698 fps	49,100 PSI
440 GR. CPB LGC	Trail Boss	.500"	2.025"	7.0	643 fps	14,600 PSI	10.0	799 fps	21,200 PSI
	AR2205	.500"	2.025"	34.0	1,496 fps	41,900 PSI	37.0	1,609 fps	49,400 PSI
500 GR. HDY SP	AR2205	.500"	2.065"	30.0	1,360 fps	42,300 PSI	32.2	1,436 fps	49,300 PSI

RIFLE DATA

17 Ackley Hornet				Case: Winchester (reformed) Twist: 1:10" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.380"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
20 GR. HDY V-MAX	AR2205	.172"	1.800"	8.5	3,080 fps	41,200 CUP	9.2	3,238 fps	45,700 CUP
	AR2207	.172"	1.800"	11.5	3,246 fps	32,700 CUP	12.5C	3,515 fps	44,400 CUP
25 GR. HDY HP	AR2207	.172"	1.760"	10.9	3,015 fps	38,800 CUP	11.6	3,176 fps	45,900 CUP
	AR2219	.172"	1.760"	12.0	2,894 fps	42,500 CUP	13.0C	3,153 fps	45,400 CUP
30 GR. BER HP	AR2207	.172"	1.800"	10.0	2,711 fps	33,400 CUP	10.7	2,923 fps	45,600 CUP
	AR2219	.172"	1.800"	11.5	2,745 fps	36,100 CUP	12.2	2,984 fps	45,700 CUP
	Bench Mark 2	.172"	1.800"	12.2	2,900 fps	43,200 CUP	13.0C	2,975 fps	44,800 CUP
17 Hornet				Case: Hornady Twist: 1:9" Primer: Federal 205M			Barrel length: 24" Trim length: 1.340"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
20 GR. HDY V-MAX	AR2207	.172"	1.715"	11.0	3,226 fps	32,200 PSI	11.8C	3,463 fps	39,300 PSI
25 GR. HDY V-MAX	AR2207	.172"	1.715"	10.3	2,983 fps	34,900 PSI	11.1C	3,187 fps	42,500 PSI
	AR2219	.172"	1.715"	12.0	3,091 fps	30,600 PSI	12.8C	3,283 fps	36,200 PSI
30 GR. BER HP	AR2207	.172"	1.715"	10.0	2,815 fps	38,700 PSI	10.8C	3,024 fps	47,300 PSI
	AR2219	.172"	1.715"	11.7	2,853 fps	40,500 PSI	12.5C	3,020 fps	48,000 PSI
17 Ackley Bee				Case: Winchester (reformed) Twist: 1:10" Primer: Winchester SR			Barrel length: 22" Trim length: 1.325"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
25 GR. HDY HP	AR2205	.172"	1.650"	10.0	2,910 fps	36,500 CUP	11.0	3,131 fps	45,300 CUP
	AR2207	.172"	1.650"	12.5	2,976 fps	32,400 CUP	13.5	3,365 fps	45,300 CUP
17 Mach IV				Case: Remington Twist: 1:10" Primer: Winchester SR			Barrel length: 21.75" Trim length: 1.390"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
25 GR. HDY HP	AR2207	.172"	1.770"	15.0	3,237 fps	36,500 CUP	16.0	3,576 fps	49,800 CUP
	AR2206	-	-	16.5	3,300 fps	-	18.5	3,700 fps	-

RIFLE DATA

17 Remington Fireball				Case: Remington Twist: 1:9" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.400"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
20 GR. HDY V-MAX	AR2207	.172"	1.830"	16.0	3,811 fps	39,200 CUP	17.3	4,037 fps	47,800 CUP
	AR2219	.172"	1.830"	18.0	3,652 fps	37,500 CUP	19.5C	4,019 fps	49,200 CUP
	Bench Mark 2	.172"	1.830"	18.5	3,758 fps	40,300 CUP	20.0C	4,013 fps	49,100 CUP
	Bench Mark 8208	.172"	1.830"	18.0	3,636 fps	33,900 CUP	20.2C	4,038 fps	44,700 CUP
25 GR. HDY HP	AR2207	.172"	1.800"	15.4	3,549 fps	40,500 CUP	17.0	3,789 fps	49,900 CUP
	AR2219	.172"	1.800"	17.0	3,504 fps	38,500 CUP	18.3	3,704 fps	48,900 CUP
	Bench Mark 2	.172"	1.800"	17.5	3,550 fps	41,900 CUP	19.0	3,745 fps	48,500 CUP
	Bench Mark 8208	.172"	1.800"	17.0	3,453 fps	34,900 CUP	19.2	3,854 fps	48,900 CUP
30 GR. BER HP	AR2207	.172"	1.800"	14.9	3,299 fps	42,400 CUP	15.9	3,481 fps	50,400 CUP
	AR2219	.172"	1.800"	16.5	3,295 fps	38,500 CUP	18.0	3,533 fps	49,300 CUP
	Bench Mark 2	.172"	1.800"	17.0	3,307 fps	39,700 CUP	18.7C	3,569 fps	49,400 CUP
	Bench Mark 8208	.172"	1.800"	16.5	3,316 fps	38,400 CUP	18.6	3,634 fps	50,200 CUP
17-222				Case: Remington (reformed) Twist: 1:10" Primer: Winchester SR			Barrel length: 21.75" Trim length: 1.690"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
25 GR. HDY HP	AR2207	.172"	2.070"	16.2	3,448 fps	42,500 CUP	17.2	3,601 fps	49,800 CUP
	AR2206	.172"	2.070"	19.0	3,415 fps	-	20.0	3,625 fps	-
	AR2206H	.172"	2.070"	19.5	3,439 fps	39,800 CUP	20.5	3,646 fps	48,000 CUP
17-223				Case: Remington (reformed) Twist: 1:10" Primer: Winchester SR			Barrel length: 22" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
25 GR. HDY HP	AR2206H	.172"	2.130"	21.0	3,681 fps	-	23.0	3,960 fps	-
17 Remington				Case: Remington Twist: 1:9" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.786"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
20 GR. HDY V-MAX	AR2219	.172"	2.170"	21.0	3,963 fps	37,500 CUP	23.2	4,292 fps	49,500 CUP
	Bench Mark 2	.172"	2.170"	22.0	3,985 fps	38,000 CUP	24.5	4,342 fps	50,500 CUP
	Bench Mark 8208	.172"	2.170"	24.0	4,138 fps	40,500 CUP	25.5	4,378 fps	48,500 CUP
	AR2206H	.172"	2.170"	23.0	4,037 fps	37,000 CUP	25.5C	4,436 fps	47,500 CUP
	AR2208	.172"	2.170"	23.5	3,936 fps	37,800 CUP	25.5C	4,208 fps	45,200 CUP
25 GR. HDY HP	AR2219	.172"	2.150"	19.5	3,656 fps	40,500 CUP	21.8	3,921 fps	49,700 CUP
	Bench Mark 2	.172"	2.150"	21.5	3,791 fps	43,000 CUP	23.3	4,038 fps	50,600 CUP
	Bench Mark 8208	.172"	2.150"	22.7	3,882 fps	42,800 CUP	24.2	4,072 fps	48,500 CUP
	AR2206H	.172"	2.150"	21.0	3,760 fps	40,500 CUP	23.0	4,033 fps	48,500 CUP
	AR2208	.172"	2.150"	22.0	3,759 fps	39,600 CUP	24.5	4,123 fps	50,800 CUP
25 GR. REM HP	Bench Mark 1	.172"	2.120"	17.5	3,535 fps	43,300 PSI	20.5	3,965 fps	61,500 PSI
	AR2206	.172"	2.120"	19.5	3,625 fps	44,000 PSI	22.0	4,000 fps	61,500 PSI

RIFLE DATA

17 Remington				Case: Remington Twist: 1:9" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.786"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
30 GR. BER HP	AR2219	.172"	2.150"	18.0	3,311 fps	38,700 CUP	20.0	3,594 fps	49,800 CUP
	Bench Mark 2	.172"	2.150"	20.0	3,444 fps	43,200 CUP	22.0	3,709 fps	50,500 CUP
	Bench Mark 8208	.172"	2.150"	21.2	3,527 fps	42,900 CUP	22.6	3,700 fps	48,800 CUP
	AR2206H	.172"	2.150"	20.0	3,495 fps	44,000 CUP	22.0	3,696 fps	49,900 CUP
	AR2208	.172"	2.150"	20.0	3,405 fps	39,700 CUP	22.5	3,742 fps	49,700 CUP
20 Tactical				Case: Winchester (reformed) Twist: 1:12" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
33 GR. HDY V-MAX	AR2207	.204"	2.245"	20.0	3,434 fps	40,500 PSI	22.5	3,844 fps	55,100 PSI
	AR2219	.204"	2.245"	23.0	3,529 fps	42,900 PSI	25.5	3,852 fps	54,900 PSI
	Bench Mark 2	.204"	2.245"	23.0	3,506 fps	41,900 PSI	25.5	3,844 fps	54,500 PSI
	AR2206H	.204"	2.245"	25.0	3,573 fps	42,700 PSI	27.0C	3,800 fps	50,600 PSI
	AR2208	.204"	2.245"	25.0	3,344 fps	37,900 PSI	27.0C	3,659 fps	49,600 PSI
36 GR. BER HP	AR2207	.204"	2.200"	20.0	3,434 fps	45,000 PSI	22.0	3,675 fps	55,000 PSI
	AR2219	.204"	2.200"	22.0	3,434 fps	44,900 PSI	24.2	3,686 fps	54,500 PSI
	Bench Mark 2	.204"	2.200"	22.0	3,358 fps	42,000 PSI	24.5	3,678 fps	54,400 PSI
	AR2206H	.204"	2.200"	24.0	3,453 fps	42,900 PSI	26.5C	3,746 fps	54,900 PSI
	AR2208	.204"	2.200"	25.0	3,456 fps	45,200 PSI	27.0C	3,681 fps	54,300 PSI
204 Ruger				Case: Hornady Twist: 1:12" Primer: Federal 205M			Barrel length: 24" Trim length: 1.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
24 GR. HDY NTX	AR2207	.204"	2.290"	22.6	4,294 fps	54,100 PSI	24.0	4,400 fps	56,600 PSI
	AR2219	.204"	2.290"	26.3	4,143 fps	48,700 PSI	28.0	4,358 fps	56,000 PSI
	Bench Mark 2	.204"	2.290"	27.3	4,109 fps	45,500 PSI	29.0	4,373 fps	54,500 PSI
	Bench Mark 8208	.204"	2.290"	27.0	3,997 fps	40,600 PSI	30.0C	4,447 fps	56,000 PSI
	AR2206H	.204"	2.290"	27.0	4,061 fps	43,400 PSI	29.5C	4,423 fps	54,900 PSI
26 GR. BAR VG FB	AR2207	.204"	2.250"	23.0	4,124 fps	54,100 PSI	24.5	4,258 fps	57,300 PSI
	AR2219	.204"	2.250"	25.9	4,055 fps	52,200 PSI	27.5	4,229 fps	57,100 PSI
	Bench Mark 2	.204"	2.250"	27.0	4,036 fps	47,600 PSI	28.7	4,279 fps	56,700 PSI
	Bench Mark 8208	.204"	2.250"	27.7	4,132 fps	48,400 PSI	29.5C	4,309 fps	54,900 PSI
	AR2206H	.204"	2.250"	28.2	4,067 fps	48,900 PSI	30.0C	4,302 fps	57,300 PSI
	AR2208	.204"	2.250"	27.5	3,962 fps	47,500 PSI	30.0C	4,110 fps	51,000 PSI
30 GR. BER FB VAR	AR2207	.204"	2.235"	22.2	3,789 fps	45,100 PSI	24.2	4,073 fps	56,300 PSI
	AR2219	.204"	2.235"	24.5	3,740 fps	44,500 PSI	26.6	4,054 fps	56,700 PSI
	Bench Mark 2	.204"	2.235"	25.7	3,754 fps	44,500 PSI	28.0	4,076 fps	56,800 PSI
	Bench Mark 8208	.204"	2.235"	26.7	3,798 fps	44,500 PSI	28.8	4,118 fps	56,400 PSI
	AR2206H	.204"	2.235"	26.2	3,800 fps	44,500 PSI	28.5	4,124 fps	56,800 PSI
	AR2208	.204"	2.235"	27.1	3,640 fps	41,300 PSI	29.5C	4,028 fps	55,200 PSI
32 GR. HDY V-MAX	AR2219	.204"	2.250"	25.5	3,826 fps	48,300 PSI	27.5	4,030 fps	56,400 PSI
	Bench Mark 2	.204"	2.250"	26.0	3,770 fps	45,500 PSI	28.0	4,047 fps	57,100 PSI

RIFLE DATA

204 Ruger				Case: Homady Twist: 1:12" Primer: Federal 205M			Barrel length: 24" Trim length: 1.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	Bench Mark 8208	.204"	2.250"	27.5	3,917 fps	47,500 PSI	29.0	4,130 fps	56,500 PSI
	AR2206H	.204"	2.250"	27.0	3,669 fps	40,500 PSI	29.0C	3,980 fps	51,100 PSI
	AR2208	.204"	2.250"	27.0	3,557 fps	38,300 PSI	29.0C	3,798 fps	47,400 PSI
35 GR. BER HP	AR2219	.204"	2.240"	24.0	3,586 fps	45,600 PSI	26.3	3,828 fps	55,400 PSI
	Bench Mark 2	.204"	2.240"	25.0	3,590 fps	44,100 PSI	26.6	3,863 fps	56,600 PSI
	Bench Mark 8208	.204"	2.240"	27.0	3,830 fps	50,700 PSI	28.2	3,961 fps	56,300 PSI
	AR2206H	.204"	2.240"	26.0	3,576 fps	42,200 PSI	28.2C	3,910 fps	55,700 PSI
	AR2208	.204"	2.240"	28.0	3,705 fps	48,300 PSI	29.0C	3,812 fps	53,100 PSI
40 GR. HDY V-MAX	AR2219	.204"	2.250"	23.0	3,319 fps	41,500 PSI	25.1	3,639 fps	55,900 PSI
	Bench Mark 2	.204"	2.250"	24.0	3,419 fps	45,200 PSI	25.7	3,646 fps	55,400 PSI
	Bench Mark 8208	.204"	2.250"	26.0	3,586 fps	48,300 PSI	27.3	3,754 fps	56,300 PSI
	AR2206H	.204"	2.250"	26.0	3,500 fps	45,500 PSI	27.7C	3,741 fps	56,000 PSI
	AR2208	.204"	2.250"	26.0	3,395 fps	44,100 PSI	28.1C	3,647 fps	55,100 PSI
50 GR. BER HPBT	AR2219	.204"	2.300"	22.0	3,105 fps	48,300 PSI	23.5	3,252 fps	55,100 PSI
	Bench Mark 2	.204"	2.300"	22.5	3,110 fps	47,800 PSI	24.0	3,256 fps	54,300 PSI
	Bench Mark 8208	.204"	2.300"	23.0	3,129 fps	47,800 PSI	24.9	3,327 fps	56,100 PSI
	AR2206H	.204"	2.300"	24.0	3,167 fps	46,900 PSI	25.7	3,352 fps	56,000 PSI
	AR2208	.204"	2.300"	24.0	3,071 fps	44,900 PSI	26.0	3,287 fps	55,200 PSI
22 Hornet				Case: Winchester Twist: 1:16" Primer: Winchester SR			Barrel length: 24" Trim length: 1.393"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. HDY V-MAX	AR2205	.224"	1.725"	10.5	2,630 fps	35,600 CUP	11.6C	2,896 fps	42,500 CUP
	AR2207	.224"	1.725"	10.5	2,223 fps	23,100 CUP	11.5C	2,420 fps	26,300 CUP
40 GR. SPR SP	AR2205	.224"	1.725"	9.0	2,421 fps	39,900 CUP	10.2	2,567 fps	43,000 CUP
	AR2207	.224"	1.725"	10.5	2,253 fps	26,100 CUP	11.5C	2,488 fps	32,800 CUP
45 GR. BAR XBT	AR2205	.224"	1.850"	8.5	2,198 fps	37,000 CUP	9.8	2,346 fps	42,700 CUP
	AR2207	.224"	1.850"	10.5	2,217 fps	31,500 CUP	11.5C	2,390 fps	36,900 CUP
45 GR. HDY SP	AR2207	.224"	1.750"	10.5	2,239 fps	28,000 CUP	11.5C	2,400 fps	32,000 CUP
50 GR. SIE SP	AR2205	.224"	1.850"	8.4	2,131 fps	39,700 CUP	9.4	2,256 fps	41,800 CUP
	AR2207	.224"	1.850"	10.5	2,102 fps	28,200 CUP	11.5C	2,296 fps	34,100 CUP
53 GR. BAR XFB	AR2205	.224"	1.850"	8.0	1,887 fps	37,600 CUP	8.7	2,062 fps	43,000 CUP
	AR2207	.224"	1.850"	10.0	2,025 fps	31,600 CUP	11.0C	2,165 fps	40,600 CUP
55 GR. HDY SP	AR2205	.224"	1.850"	8.0	1,915 fps	41,800 CUP	9.0	2,095 fps	43,000 CUP
	AR2207	.224"	1.850"	10.0	1,955 fps	30,000 CUP	11.5C	2,273 fps	41,000 CUP

RIFLE DATA

22 K Hornet				Case: Winchester (reformed) Twist: 1:14" Primer: Winchester SR			Barrel length: 24" Trim length: 1.393"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. HDY V-MAX	AR2205	.224"	1.725"	11.0	2,809 fps	39,500 CUP	12.3	3,023 fps	46,000 CUP
40 GR. NOS BT	AR2205	.224"	1.900"	11.0	2,684 fps	37,500 CUP	12.2C	2,871 fps	45,500 CUP
45 GR. BAR XBT	AR2205	.224"	1.850"	10.5	2,524 fps	40,900 CUP	11.3	2,633 fps	45,300 CUP
45 GR. SPR SP	AR2205	.224"	1.750"	10.7	2,574 fps	40,700 CUP	11.7	2,747 fps	45,500 CUP
50 GR. SIE BK	AR2205	.224"	1.900"	10.0	2,398 fps	40,200 CUP	11.0	2,538 fps	45,700 CUP
	AR2207	.224"	1.900"	11.5	2,246 fps	30,100 CUP	12.5C	2,460 fps	38,700 CUP
53 GR. BAR XFB	AR2205	.224"	1.850"	9.5	2,208 fps	39,000 CUP	10.5	2,366 fps	45,900 CUP
	AR2207	.224"	1.850"	11.2	2,195 fps	30,200 CUP	12.5C	2,386 fps	42,600 CUP
55 GR. HDY SP	AR2205	.224"	1.850"	10.0	2,315 fps	43,400 CUP	11.0	2,445 fps	46,100 CUP
	AR2207	.224"	1.850"	11.5	2,223 fps	31,100 CUP	12.5C	2,388 fps	39,400 CUP

218 Bee				Case: Winchester Twist: 1:16" Primer: Winchester SR			Barrel length: 24" Trim length: 1.335"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. HDY V-MAX	AR2205	.224"	1.650"	11.0	2,656 fps	30,400 CUP	13.3	3,035 fps	38,300 CUP
40 GR. SIE BK	AR2205	.224"	1.820"	11.0	2,608 fps	33,800 CUP	12.8	2,865 fps	38,700 CUP
46 GR. SPR JFP	AR2205	.224"	1.670"	9.0	2,143 fps	23,300 CUP	10.7	2,424 fps	38,200 CUP
	AR2207	.224"	1.670"	13.5	2,417 fps	26,700 CUP	15.0C	2,708 fps	37,200 CUP
50 GR. NOS BT	AR2205	.224"	1.900"	9.5	2,195 fps	29,500 CUP	10.8	2,421 fps	38,400 CUP
	AR2207	.224"	1.900"	13.5	2,420 fps	29,500 CUP	14.9C	2,654 fps	38,500 CUP

221 Remington Fireball				Case: Remington Twist: 1:14" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.390"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. HDY V-MAX	AR2205	.224"	1.745"	14.8	3,110 fps	37,500 CUP	16.5	3,403 fps	50,600 CUP
	AR2207	.224"	1.745"	18.0	3,056 fps	31,900 CUP	20.0C	3,423 fps	44,700 CUP
36 GR. BAR VG FB	AR2207	.224"	1.830"	18.0	3,177 fps	35,000 CUP	19.0C	3,361 fps	41,500 CUP
40 GR. NOS BT	AR2205	.224"	1.830"	14.5	3,042 fps	43,100 CUP	16.0	3,251 fps	50,200 CUP
	AR2207	.224"	1.830"	17.0	2,851 fps	30,000 CUP	19.0C	3,195 fps	40,300 CUP
	AR2219	.224"	1.830"	19.7	2,883 fps	33,200 CUP	21.0C	3,087 fps	39,100 CUP
45 GR. BAR X	AR2205	.224"	1.830"	13.8	2,848 fps	43,500 CUP	15.3	3,015 fps	48,600 CUP
	AR2207	.224"	1.830"	17.6	2,934 fps	37,200 CUP	19.5C	3,184 fps	46,500 CUP
	AR2219	.224"	1.830"	19.0	2,762 fps	31,600 CUP	20.5C	2,978 fps	39,900 CUP
45 GR. SIE SPT	AR2205	.224"	1.800"	14.0	2,872 fps	40,900 CUP	15.7	3,078 fps	49,100 CUP
	AR2207	.224"	1.800"	17.5	2,851 fps	31,700 CUP	19.5C	3,178 fps	43,700 CUP
	AR2219	.224"	1.800"	19.0	2,767 fps	31,400 CUP	20.5C	2,955 fps	37,000 CUP
50 GR. SPR TNT HP	AR2205	.224"	1.830"	13.0	2,629 fps	36,500 CUP	14.8	2,901 fps	51,200 CUP
	AR2207	.224"	1.830"	16.5	2,661 fps	27,800 CUP	18.5C	2,996 fps	40,800 CUP
	AR2219	.224"	1.830"	19.0	2,703 fps	31,600 CUP	21.0C	2,968 fps	40,100 CUP
52 GR. SIE HPBT	AR2205	.224"	1.830"	13.0	2,612 fps	40,900 CUP	14.5	2,798 fps	48,100 CUP
	AR2207	.224"	1.830"	16.7	2,692 fps	33,700 CUP	18.5C	2,967 fps	45,300 CUP
	AR2219	.224"	1.830"	18.9	2,693 fps	35,100 CUP	21.0C	2,987 fps	46,800 CUP

RIFLE DATA

221 Remington Fireball				Case: Remington Twist: 1:14" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.390"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. HDY SPSX	AR2205	.224"	1.830"	13.5	2,643 fps	48,100 CUP	14.5	2,742 fps	49,300 CUP
	AR2207	.224"	1.830"	16.7	2,655 fps	34,100 CUP	18.5	2,922 fps	46,800 CUP
	AR2219	.224"	1.830"	18.9	2,681 fps	36,000 CUP	21.0C	2,944 fps	48,200 CUP
222 Remington				Case: Winchester Twist: 1:14" Primer: Winchester SR			Barrel length: 24" Trim length: 1.690"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. NOS BT LF	AR2207	.224"	2.130"	19.3	3,472 fps	44,800 PSI	20.5	3,612 fps	47,300 PSI
	AR2219	.224"	2.130"	21.6	3,290 fps	39,700 PSI	23.2	3,527 fps	47,600 PSI
	Bench Mark 2	.224"	2.130"	22.5	3,316 fps	34,600 PSI	25.0C	3,665 fps	48,600 PSI
	Bench Mark 8208	.224"	2.130"	22.1	3,096 fps	32,500 PSI	24.5C	3,516 fps	42,200 PSI
35 GR. HDY V-MAX	AR2205	.224"	2.025"	15.0	3,095 fps	38,100 CUP	17.2	3,342 fps	43,000 CUP
	AR2207	.224"	2.025"	20.5	3,366 fps	36,500 CUP	22.0	3,591 fps	43,300 CUP
	AR2219	.224"	2.025"	23.5	3,316 fps	36,500 CUP	25.2C	3,591 fps	45,600 CUP
	Bench Mark 2	.224"	2.025"	23.5	3,138 fps	33,700 CUP	25.0C	3,368 fps	40,900 CUP
	Bench Mark 8208	.224"	2.025"	23.0	3,181 fps	32,000 PSI	25.0C	3,464 fps	40,500 PSI
36 GR. BAR VG FB	AR2207	.224"	2.150"	19.3	3,277 fps	40,500 PSI	20.5	3,470 fps	46,700 PSI
	AR2219	.224"	2.150"	22.3	3,331 fps	41,400 PSI	23.7	3,535 fps	47,500 PSI
	Bench Mark 2	.224"	2.150"	22.0	3,178 fps	38,500 PSI	24.0C	3,471 fps	48,300 PSI
	Bench Mark 8208	.224"	2.150"	22.0	3,144 fps	36,700 PSI	25.0C	3,582 fps	40,400 PSI
40 GR. SIE HP	AR2207	.224"	2.125"	19.5	3,201 fps	35,200 CUP	21.4	3,480 fps	45,700 CUP
	AR2219	.224"	2.125"	20.7	2,966 fps	31,700 CUP	23.0	3,313 fps	44,000 CUP
	Bench Mark 2	.224"	2.125"	23.5	3,110 fps	34,800 CUP	25.0	3,303 fps	40,700 CUP
	Bench Mark 8208	.224"	2.125"	22.5	3,049 fps	30,400 PSI	25.0C	3,452 fps	42,800 PSI
	AR2206H	.224"	2.125"	20.0	2,572 fps	23,300 CUP	24.0C	3,133 fps	34,200 CUP
40 GR. HDY V-MAX	Bench Mark 1	.224"	2.132"	21.0	3,030 fps	28,500 PSI	23.5	3,525 fps	49,400 PSI
	AR2206	.224"	2.132"	23.0	3,060 fps	31,100 PSI	24.5C	3,365 fps	40,600 PSI
45 GR. SPR SP	AR2205	.224"	2.130"	11.0	2,259 fps	24,300 CUP	14.5	2,863 fps	46,100 CUP
	AR2207	.224"	2.130"	18.9	3,011 fps	33,400 CUP	21.0	3,315 fps	44,800 CUP
	AR2219	.224"	2.130"	20.5	2,914 fps	34,600 CUP	22.5	3,173 fps	43,600 CUP
	Bench Mark 2	.224"	2.130"	23.0	3,092 fps	39,700 CUP	24.5	3,290 fps	44,900 CUP
	Bench Mark 8208	.224"	2.130"	22.2	3,121 fps	38,700 PSI	23.6	3,327 fps	47,200 PSI
	AR2206H	.224"	2.130"	20.0	2,510 fps	25,000 CUP	23.8C	3,080 fps	35,900 CUP
45 GR. HDY SP	Bench Mark 1	.224"	2.132"	21.0	3,000 fps	33,300 PSI	23.5	3,345 fps	46,300 PSI
50 GR. HDY SP	AR2207	.224"	2.130"	18.5	2,890 fps	34,000 CUP	20.5	3,160 fps	44,200 CUP
	Bench Mark 1	.224"	2.132"	20.0	2,830 fps	32,000 PSI	22.5	3,220 fps	47,500 PSI
	AR2219	.224"	2.130"	20.2	2,810 fps	33,300 CUP	22.2	3,079 fps	43,200 CUP
	Bench Mark 2	.224"	2.130"	22.5	2,994 fps	39,200 CUP	24.0	3,168 fps	45,800 CUP
	Bench Mark 8208	.224"	2.130"	21.9	3,006 fps	39,200 PSI	23.3	3,201 fps	47,100 PSI
	AR2206	.224"	2.132"	22.0	2,905 fps	34,100 PSI	24.0	3,225 fps	46,300 PSI
	AR2206H	.224"	2.130"	20.0	2,466 fps	23,900 CUP	23.8C	3,022 fps	36,500 CUP
	AR2208	.224"	2.130"	23.0	2,884 fps	33,600 CUP	25.0C	3,114 fps	40,600 CUP
53 GR. HDY HP	AR2207	.224"	2.140"	17.5	2,800 fps	35,300 CUP	19.5	3,038 fps	45,500 CUP
	Bench Mark 1	.224"	2.200"	20.5	2,890 fps	42,500 PSI	21.6	3,060 fps	49,800 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

222 Remington				Case: Winchester Twist: 1:14" Primer: Winchester SR			Barrel length: 24" Trim length: 1.690"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2219	.224"	2.140"	19.3	2,724 fps	34,900 CUP	21.5	3,005 fps	46,000 CUP
	Bench Mark 2	.224"	2.140"	21.5	2,852 fps	38,800 CUP	23.0	3,063 fps	45,500 CUP
	Bench Mark 8208	.224"	2.140"	21.4	2,844 fps	36,100 PSI	22.8	3,117 fps	48,200 PSI
	AR2206H	.224"	2.140"	20.0	2,585 fps	27,800 CUP	23.5C	3,043 fps	41,600 CUP
	AR2208	.224"	2.140"	23.0	2,863 fps	33,500 CUP	25.0C	3,097 fps	42,700 CUP
55 GR. SPR SP	AR2207	.224"	2.130"	17.5	2,733 fps	33,400 CUP	19.5	3,017 fps	45,300 CUP
	AR2219	.224"	2.130"	19.0	2,654 fps	31,600 CUP	21.2	2,953 fps	45,100 CUP
	Bench Mark 2	.224"	2.130"	21.5	2,843 fps	38,100 CUP	23.2	3,052 fps	45,100 CUP
	Bench Mark 8208	.224"	2.130"	21.8	2,905 fps	38,400 PSI	23.2C	3,120 fps	48,500 PSI
	AR2206H	.224"	2.130"	20.0	2,569 fps	28,900 CUP	23.5C	3,023 fps	39,900 CUP
	AR2208	.224"	2.130"	23.0	2,860 fps	34,500 CUP	25.0C	3,095 fps	43,000 CUP
55 GR. NOS BT	Bench Mark 1	.224"	2.145"	20.0	2,845 fps	38,800 PSI	22.0	3,055 fps	48,900 PSI
	AR2206	.224"	2.145"	22.0	2,850 fps	36,700 PSI	23.7	3,125 fps	49,800 PSI
60 GR. HDY V-MAX	AR2207	.224"	2.160"	16.9	2,633 fps	36,100 CUP	18.0	2,771 fps	42,400 CUP
	AR2219	.224"	2.160"	19.0	2,592 fps	34,800 CUP	20.7	2,818 fps	42,900 CUP
	Bench Mark 2	.224"	2.160"	19.7	2,627 fps	35,900 CUP	21.0	2,805 fps	42,800 CUP
	Bench Mark 8208	.224"	2.160"	20.5	2,737 fps	39,200 PSI	21.8	2,920 fps	48,200 PSI
	AR2206H	.224"	2.160"	21.7	2,802 fps	38,500 CUP	23.1C	2,937 fps	43,500 CUP
	AR2208	.224"	2.160"	22.0	2,734 fps	36,600 CUP	23.5C	2,906 fps	42,800 CUP
63 GR. SIE SP	AR2207	.224"	2.125"	16.9	2,597 fps	36,200 CUP	18.8	2,793 fps	43,800 CUP
	AR2219	.224"	2.125"	18.6	2,531 fps	33,600 CUP	20.7	2,780 fps	44,400 CUP
	Bench Mark 2	.224"	2.125"	21.0	2,732 fps	39,000 CUP	22.5	2,903 fps	45,700 CUP
	Bench Mark 8208	.224"	2.125"	20.2	2,681 fps	39,300 PSI	21.5	2,865 fps	48,400 PSI
	AR2206H	.224"	2.125"	20.0	2,537 fps	30,300 CUP	23.5C	2,965 fps	45,500 CUP
	AR2208	.224"	2.125"	22.0	2,718 fps	34,500 CUP	24.0C	2,935 fps	43,800 CUP
	Bench Mark 1	-	-	18.5	2,520 fps	-	20.3	2,765 fps	-
	AR2206	-	-	20.5	2,605 fps	-	23.0	2,925 fps	-
223 Remington (5.6 x 45mm)				Case: Winchester Twist: 1:12" Primer: Winchester SR			Barrel length: 24" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. NOS BT LF	AR2207	.224"	2.280"	20.4	3,599 fps	45,100 PSI	21.7	3,780 fps	52,000 PSI
	AR2219	.224"	2.280"	24.3	3,610 fps	43,800 PSI	25.8	3,771 fps	50,600 PSI
	Bench Mark 2	.224"	2.280"	24.5	3,555 fps	42,700 PSI	27.2C	3,851 fps	52,900 PSI
	Bench Mark 8208	.224"	2.280"	25.2	3,560 fps	41,100 PSI	28.0C	3,891 fps	53,400 PSI
	AR2206H	.224"	2.280"	24.3	3,522 fps	39,600 PSI	27.0C	3,891 fps	53,000 PSI
	AR2208	.224"	2.280"	25.2	3,424 fps	38,500 PSI	28.0C	3,751 fps	49,300 PSI
36 GR. BAR VG FB	AR2207	.224"	2.200"	21.1	3,511 fps	36,800 PSI	22.5	3,723 fps	51,800 PSI
	AR2219	.224"	2.200"	24.2	3,523 fps	44,300 PSI	25.7	3,721 fps	52,700 PSI
	Bench Mark 2	.224"	2.200"	24.4	3,508 fps	44,100 PSI	26.0	3,702 fps	50,800 PSI
	Bench Mark 8208	.224"	2.200"	25.4	3,548 fps	44,500 PSI	27.0C	3,728 fps	50,600 PSI
	AR2206H	.224"	2.200"	25.5	3,487 fps	36,500 PSI	27.3C	3,755 fps	49,200 PSI
	AR2208	.224"	2.200"	24.8	3,278 fps	37,000 PSI	27.5C	3,593 fps	47,300 PSI
40 GR. NOS BT	AR2207	.224"	2.280"	20.5	3,147 fps	29,400 CUP	22.5	3,601 fps	49,600 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

223 Remington (5.6 x 45mm)				Case: Winchester Twist: 1:12" Primer: Winchester SR			Barrel length: 24" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR.	Bench Mark 1	-	-	22.5	3,180 fps	-	25.2	3,560 fps	-
40 GR. NOS BT	AR2219	.224"	2.280"	23.5	3,376 fps	34,600 CUP	25.5	3,574 fps	48,000 CUP
	Bench Mark 2	.224"	2.280"	25.3	3,404 fps	39,600 CUP	27.3	3,666 fps	51,000 CUP
	Bench Mark 8208	.224"	2.280"	25.0	3,433 fps	41,500 PSI	26.7C	3,659 fps	50,400 PSI
40 GR.	AR2206	-	-	24.8	3,240 fps	-	27.5C	3,590 fps	-
40 GR. NOS BT	AR2206H	.224"	2.280"	25.0	3,204 fps	32,100 CUP	27.5C	3,573 fps	44,500 CUP
	AR2208	.224"	2.280"	25.0	3,310 fps	34,400 CUP	28.0C	3,674 fps	47,200 CUP
45 GR. SFIRE	AR2207	.224"	2.220"	19.0	3,097 fps	40,200 PSI	21.8	3,414 fps	51,400 PSI
	AR2219	.224"	2.220"	22.0	3,088 fps	38,900 PSI	24.6C	3,399 fps	50,800 PSI
	Bench Mark 2	.224"	2.220"	22.5	3,130 fps	39,600 PSI	25.0	3,410 fps	51,000 PSI
	Bench Mark 8208	.224"	2.220"	23.0	3,124 fps	38,800 PSI	26.0C	3,491 fps	52,100 PSI
45 GR. SIE SP	AR2207	.224"	2.240"	20.0	3,009 fps	28,800 CUP	22.0	3,472 fps	49,100 CUP
	AR2219	.224"	2.240"	23.0	3,164 fps	36,000 CUP	25.0	3,424 fps	47,400 CUP
	Bench Mark 2	.224"	2.240"	25.3	3,327 fps	41,100 CUP	27.3	3,554 fps	51,100 CUP
	Bench Mark 8208	.224"	2.240"	24.5	3,287 fps	41,700 PSI	26.8	3,550 fps	52,000 PSI
	AR2206H	.224"	2.240"	25.0	3,211 fps	33,800 CUP	27.5C	3,454 fps	43,400 CUP
	AR2208	.224"	2.240"	25.0	3,071 fps	30,200 CUP	28.0C	3,477 fps	43,700 CUP
50 GR. SPR SP	AR2207	.224"	2.210"	19.5	3,023 fps	32,400 CUP	21.5	3,223 fps	45,900 CUP
50 GR.	Bench Mark 1	-	-	21.5	2,980 fps	-	23.8	3,300 fps	-
50 GR. SPR SP	AR2219	.224"	2.210"	22.0	3,018 fps	36,500 CUP	24.0	3,301 fps	49,300 CUP
	Bench Mark 2	.224"	2.210"	24.0	3,139 fps	38,600 CUP	26.5	3,396 fps	50,400 CUP
	Bench Mark 8208	.224"	2.210"	23.5	3,111 fps	40,500 PSI	25.8	3,407 fps	53,300 PSI
50 GR.	AR2206	-	-	24.0	3,130 fps	-	26.5C	3,455 fps	-
50 GR. SPR SP	AR2206H	.224"	2.210"	25.0	3,200 fps	38,300 CUP	27.5C	3,468 fps	51,300 CUP
	AR2208	.224"	2.210"	26.5	3,242 fps	40,800 CUP	27.5C	3,383 fps	44,800 CUP
53 GR. SIE HP	AR2207	.224"	2.200"	19.5	2,986 fps	34,200 CUP	21.5	3,188 fps	46,700 CUP
53 GR.	Bench Mark 1	-	-	21.0	2,890 fps	-	23.0	3,165 fps	-
53 GR. SIE HP	AR2219	.224"	2.200"	21.5	2,912 fps	39,200 CUP	23.5	3,183 fps	48,900 CUP
	Bench Mark 2	.224"	2.200"	24.0	3,102 fps	39,900 CUP	26.0	3,308 fps	49,800 CUP
	Bench Mark 8208	.224"	2.200"	23.0	3,032 fps	41,400 PSI	25.4	3,310 fps	53,400 PSI
53 GR.	AR2206	-	-	24.0	3,050 fps	-	26.5	3,365 fps	-
53 GR. SIE HP	AR2206H	.224"	2.200"	25.0	3,166 fps	37,400 CUP	27.0C	3,383 fps	48,600 CUP
	AR2208	.224"	2.200"	24.0	3,026 fps	38,400 CUP	27.0C	3,389 fps	47,900 CUP
55 GR. HDY FMJ	AS30N	.224"	2.200"	-	-	-	3.2	1,060 fps	3,700 CUP
	Trail Boss	.224"	2.200"	-	-	-	4.0	1,074 fps	-
55 GR. SFIRE	AR2207	.224"	2.220"	18.0	2,852 fps	42,700 PSI	20.4	3,084 fps	51,400 PSI
	AR2219	.224"	2.220"	21.0	2,894 fps	42,800 PSI	23.1	3,113 fps	51,700 PSI
	Bench Mark 2	.224"	2.220"	21.0	2,903 fps	42,600 PSI	23.4	3,128 fps	51,000 PSI
	AR2206H	.224"	2.220"	22.0	2,941 fps	40,600 PSI	24.6C	3,226 fps	53,500 PSI
	AR2208	.224"	2.220"	23.5	2,990 fps	45,200 PSI	25.1C	3,149 fps	51,700 PSI
55 GR. BAR TSX FB	AR2219	.224"	2.180"	21.0	2,953 fps	48,600 PSI	22.4	3,083 fps	51,300 PSI
	Bench Mark 2	.224"	2.180"	20.0	2,885 fps	47,600 PSI	22.2	3,066 fps	52,200 PSI
	Bench Mark 8208	.224"	2.180"	21.5	2,949 fps	47,600 PSI	23.0	3,105 fps	52,900 PSI
	AR2206H	.224"	2.180"	21.0	2,910 fps	43,700 PSI	22.6	3,110 fps	51,500 PSI
	AR2208	.224"	2.180"	22.8	2,996 fps	47,600 PSI	24.0C	3,134 fps	53,300 PSI

RIFLE DATA

223 Remington (5.6 x 45mm)				Case: Winchester Twist: 1:12" Primer: Winchester SR			Barrel length: 24" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. SPR SP	AR2207	.224"	2.200"	19.0	2,841 fps	34,800 CUP	21.0	3,150 fps	47,600 CUP
	Bench Mark 1	-	-	20.5	2,715 fps	-	22.6	2,995 fps	-
	AR2219	.224"	2.200"	21.0	2,841 fps	38,600 CUP	23.0	3,106 fps	48,900 CUP
	Bench Mark 2	.224"	2.200"	24.0	3,113 fps	42,600 CUP	25.6	3,264 fps	50,000 CUP
	Bench Mark 8208	.224"	2.200"	23.0	3,024 fps	42,100 PSI	25.3	3,268 fps	53,100 PSI
	AR2206	-	-	24.5	3,130 fps	-	25.5	3,260 fps	-
	AR2206H	.224"	2.200"	25.0	3,176 fps	39,700 CUP	26.0	3,315 fps	49,000 CUP
	AR2208	.224"	2.200"	25.5	3,174 fps	41,300 CUP	27.5C	3,384 fps	49,700 CUP
60 GR. HDY V-MAX	AR2207	.224"	2.250"	18.0	2,747 fps	42,500 CUP	20.0	2,953 fps	47,600 CUP
	AR2219	.224"	2.250"	22.0	2,873 fps	40,300 CUP	23.5	3,063 fps	49,800 CUP
	Bench Mark 2	.224"	2.250"	23.0	2,913 fps	42,500 CUP	24.6	3,086 fps	49,900 CUP
	Bench Mark 8208	.224"	2.250"	21.5	2,857 fps	43,500 PSI	23.6	3,057 fps	51,700 PSI
	AR2206H	.224"	2.250"	24.0	2,918 fps	37,600 CUP	26.0C	3,174 fps	50,100 CUP
	AR2208	.224"	2.250"	25.0	2,924 fps	40,400 CUP	27.0C	3,159 fps	51,900 CUP
62 GR. SFT SCIR	AR2219	.224"	2.260"	19.5	2,717 fps	45,400 PSI	21.2	2,904 fps	52,300 PSI
	Bench Mark 2	.224"	2.260"	20.8	2,755 fps	45,400 PSI	22.7	2,948 fps	52,800 PSI
	Bench Mark 8208	.224"	2.260"	21.4	2,787 fps	43,400 PSI	23.2	2,999 fps	53,000 PSI
	AR2206H	.224"	2.260"	21.0	2,740 fps	42,300 PSI	23.0	3,004 fps	53,000 PSI
	AR2208	.224"	2.260"	22.1	2,773 fps	44,700 PSI	24.1	2,974 fps	52,600 PSI
63 GR. SIE SP	AR2207	.224"	2.200"	18.0	2,680 fps	33,600 CUP	20.0	2,846 fps	44,600 CUP
	AR2219	.224"	2.200"	20.0	2,672 fps	38,100 CUP	22.0	2,862 fps	48,400 CUP
	Bench Mark 2	.224"	2.200"	22.0	2,845 fps	41,800 CUP	24.2	3,066 fps	50,500 CUP
	Bench Mark 8208	.224"	2.200"	21.0	2,783 fps	43,000 PSI	23.1	2,995 fps	52,400 PSI
	AR2206H	.224"	2.200"	23.5	2,831 fps	43,300 CUP	25.5	3,078 fps	50,000 CUP
	AR2208	.224"	2.200"	24.5	3,000 fps	42,400 CUP	26.4C	3,199 fps	50,700 CUP
69 GR. SIE HPBT	AR2219	.224"	2.235"	21.0	2,746 fps	40,500 CUP	23.0	2,932 fps	49,400 CUP
	Bench Mark 2	.224"	2.235"	21.5	2,770 fps	39,700 CUP	23.5	2,970 fps	49,700 CUP
	Bench Mark 8208	.224"	2.235"	21.0	2,696 fps	42,200 PSI	23.8	2,959 fps	52,900 PSI
	AR2206	-	-	22.0	2,675 fps	-	24.0	2,920 fps	-
	AR2206H	.224"	2.235"	24.0	2,870 fps	41,100 CUP	26.0C	3,069 fps	49,700 CUP
	AR2208	.224"	2.235"	24.0	2,784 fps	39,200 CUP	26.0C	3,010 fps	50,200 CUP
70 GR. SPR SP	AR2219	.224"	2.140"	19.0	2,515 fps	37,500 CUP	23.0	2,962 fps	51,200 CUP
	Bench Mark 2	.224"	2.140"	20.5	2,665 fps	45,200 CUP	22.8	2,869 fps	51,000 CUP
	Bench Mark 8208	.224"	2.140"	20.0	2,621 fps	44,100 PSI	21.8	2,797 fps	52,800 PSI
	AR2206H	.224"	2.140"	23.0	2,782 fps	40,400 CUP	25.0	2,997 fps	50,500 CUP
	AR2208	.224"	2.140"	23.5	2,827 fps	41,000 CUP	26.0C	3,024 fps	48,400 CUP
75 GR. JLK VLD	AR2219	.224"	2.250"	20.0	2,594 fps	40,700 CUP	22.0	2,785 fps	48,100 CUP
	Bench Mark 2	.224"	2.250"	21.5	2,610 fps	41,900 CUP	23.5	2,829 fps	49,400 CUP
	Bench Mark 8208	.224"	2.250"	20.0	2,538 fps	40,800 PSI	22.7	2,804 fps	53,900 PSI
	AR2206H	.224"	2.250"	22.5	2,696 fps	39,900 CUP	24.5	2,905 fps	50,000 CUP
	AR2208	.224"	2.250"	22.5	2,693 fps	40,600 CUP	25.0C	2,907 fps	48,400 CUP
77 GR. SIE HPBT	AR2219	.224"	2.260"	20.0	2,578 fps	44,900 CUP	21.8	2,721 fps	50,900 CUP
	Bench Mark 2	.224"	2.260"	20.5	2,523 fps	27,400 CUP	22.8	2,763 fps	50,000 CUP
	Bench Mark 8208	.224"	2.260"	20.5	2,535 fps	41,800 PSI	23.2	2,792 fps	55,000 PSI
	AR2206H	.224"	2.260"	20.0	2,474 fps	40,300 CUP	22.6C	2,727 fps	50,200 CUP

RIFLE DATA

223 Remington (5.6 x 45mm)				Case: Winchester			Barrel length: 24"		
				Twist: 1:12"			Trim length: 1.750"		
				Primer: Winchester SR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
80 GR. SIE HPBT	AR2208	.224"	2.260"	21.0	2,528 fps	42,700 CUP	23.7C	2,737 fps	50,700 CUP
	AR2219	.224"	2.550"	20.0	2,546 fps	40,700 CUP	22.0	2,744 fps	49,000 CUP
	Bench Mark 2	.224"	2.550"	20.5	2,525 fps	43,900 CUP	22.5	2,700 fps	49,600 CUP
	Bench Mark 8208	.224"	2.550"	19.0	2,456 fps	44,400 PSI	21.0	2,628 fps	52,900 PSI
	AR2206	-	-	20.5	2,500 fps	-	22.5	2,710 fps	-
	AR2206H	.224"	2.550"	21.5	2,578 fps	40,100 CUP	24.0	2,825 fps	50,000 CUP
82 GR. BER BT TARG	AR2208	.224"	2.550"	22.0	2,547 fps	40,300 CUP	25.0C	2,869 fps	51,500 CUP
	Bench Mark 8208	.224"	2.375"	18.4	2,392 fps	44,440 PSI	19.9	2,554 fps	52,100 PSI
	AR2206H	.223"	2.375"	18.9	2,448 fps	46,500 PSI	20.4	2,585 fps	52,700 PSI
90 GR. SIE HPBT	AR2208	.224"	2.375"	20.0	2,417 fps	44,000 PSI	21.5	2,590 fps	52,800 PSI
	Bench Mark 8208	.224"	2.380"	18.0	2,270 fps	45,600 PSI	19.6	2,419 fps	52,800 PSI
	AR2206H	.224"	2.380"	20.0	2,352 fps	47,500 PSI	21.5	2,481 fps	53,500 PSI
AR2208	.224"	2.380"	21.0	2,332 fps	46,700 PSI	22.3C	2,447 fps	52,100 PSI	
222 Remington Magnum				Case: Remington			Barrel length: 26"		
				Twist: 1:14"			Trim length: 1.840"		
				Primer: Remington 7 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR. SIE SP	AR2205	.224"	2.145"	15.5	2,714 fps	29,400 CUP	17.0	3,062 fps	36,600 CUP
	AR2207	.224"	2.145"	23.0	3,592 fps	45,400 CUP	24.5	3,760 fps	49,100 CUP
	AR2219	.224"	2.145"	25.0	3,318 fps	35,300 CUP	27.0	3,622 fps	48,400 CUP
	AR2206H	.224"	2.145"	26.5	3,363 fps	34,800 CUP	29.0	3,490 fps	45,400 CUP
45 GR. SPR SP	AR2207	.224"	2.220"	22.0	3,392 fps	42,400 CUP	24.0	3,641 fps	50,200 CUP
	AR2219	.224"	2.220"	24.5	3,159 fps	33,300 CUP	26.5	3,532 fps	50,300 CUP
	AR2206H	.224"	2.220"	26.5	3,314 fps	35,400 CUP	29.0	3,442 fps	49,700 CUP
50 GR. HDY SP	AR2207	.224"	2.305"	21.5	3,147 fps	39,600 CUP	23.5	3,379 fps	45,400 CUP
	AR2219	.224"	2.305"	24.0	3,128 fps	38,100 CUP	26.0	3,385 fps	49,300 CUP
	AR2206H	.224"	2.305"	26.0	3,166 fps	41,400 CUP	28.5	3,306 fps	45,900 CUP
53 GR. SIE HP	AR2207	.224"	2.275"	21.0	3,076 fps	38,400 CUP	23.0	3,282 fps	45,900 CUP
	AR2219	.224"	2.275"	24.0	3,014 fps	39,200 CUP	25.0	3,285 fps	49,800 CUP
	AR2206H	.224"	2.275"	25.5	3,137 fps	40,800 CUP	28.0	3,272 fps	48,500 CUP
55 GR. HDY SP	AR2207	.224"	2.325"	21.0	3,024 fps	37,800 CUP	23.0	3,222 fps	46,300 CUP
	AR2219	.224"	2.325"	22.5	2,867 fps	36,500 CUP	24.5	3,191 fps	49,300 CUP
	AR2206H	.224"	2.325"	25.5	3,121 fps	39,000 CUP	28.0	3,257 fps	48,900 CUP
63 GR. SIE SP	AR2207	.224"	2.280"	18.5	2,845 fps	40,200 CUP	20.5	3,019 fps	47,800 CUP
	AR2219	.224"	2.280"	21.5	2,763 fps	38,100 CUP	23.5	2,934 fps	48,900 CUP
	AR2206H	.224"	2.280"	24.5	2,869 fps	37,800 CUP	26.5	3,046 fps	48,400 CUP

RIFLE DATA

22 PPC				Case: Sako (reformed)			Barrel length: 24"		
				Twist: 1:14"			Trim length: 1.510"		
				Primer: Remington 7 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR. NOS BT	Bench Mark 2	.224"	2.065"	27.0	3,349 fps	37,500 CUP	30.0	3,675 fps	49,200 CUP
	Bench Mark 8208	.224"	2.065"	27.0	3,366 fps	38,400 CUP	29.3C	3,684 fps	47,000 CUP
	AR2208	.224"	2.065"	27.5	3,314 fps	36,000 CUP	29.5C	3,560 fps	45,700 CUP
50 GR. SPR SP	Bench Mark 1	-	-	23.5	3,030 fps	-	26.0	3,350 fps	-
	AR2219	.224"	2.065"	25.0	3,204 fps	42,000 CUP	26.0	3,385 fps	48,000 CUP
	Bench Mark 2	.224"	2.065"	27.0	3,204 fps	40,000 CUP	29.0	3,430 fps	49,600 CUP
	Bench Mark 8208	.224"	2.065"	26.0	3,213 fps	40,600 CUP	28.8C	3,507 fps	50,400 CUP
	AR2206	-	-	24.8	3,020 fps	-	27.5	3,350 fps	-
	AR2206H	.224"	2.065"	26.0	2,989 fps	37,100 CUP	28.0	3,347 fps	46,500 CUP
	AR2208	.224"	2.065"	27.5	3,205 fps	37,100 CUP	29.5	3,408 fps	48,200 CUP
53 GR. HDY HP	Bench Mark 1	-	-	23.5	3,050 fps	-	25.5	3,310 fps	-
	AR2219	.224"	2.065"	24.0	3,046 fps	39,800 CUP	26.0	3,333 fps	48,500 CUP
	Bench Mark 2	.224"	2.065"	26.5	3,141 fps	40,200 CUP	28.5	3,368 fps	49,400 CUP
	Bench Mark 8208	.224"	2.065"	25.5	3,112 fps	37,300 CUP	28.2	3,418 fps	48,700 CUP
	AR2206H	.224"	2.065"	26.0	3,079 fps	41,500 CUP	28.0	3,321 fps	49,000 CUP
	AR2208	.224"	2.065"	26.5	3,179 fps	39,100 CUP	28.5	3,363 fps	48,900 CUP
55 GR. SPR SP	AR2219	.224"	2.050"	24.0	3,052 fps	41,400 CUP	26.0	3,306 fps	50,000 CUP
	Bench Mark 2	.224"	2.050"	26.0	3,080 fps	39,900 CUP	28.2	3,310 fps	49,600 CUP
	Bench Mark 8208	.224"	2.050"	25.0	3,006 fps	35,400 CUP	28.0	3,362 fps	48,600 CUP
	AR2206H	.224"	2.050"	26.0	3,047 fps	42,000 CUP	28.0	3,346 fps	50,000 CUP
	AR2208	.224"	2.050"	26.5	3,147 fps	43,600 CUP	28.5	3,317 fps	47,800 CUP
22 BR Remington				Case: Remington (reformed)			Barrel length: 24"		
				Twist: 1:14"			Trim length: 1.510"		
				Primer: Remington 7 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR. NOS BT	AR2207	.224"	2.090"	25.5	3,645 fps	43,200 CUP	27.6	3,859 fps	50,400 CUP
	AR2219	.224"	2.090"	28.0	3,561 fps	38,000 CUP	30.0	3,795 fps	49,000 CUP
	Bench Mark 2	.224"	2.090"	30.0	3,542 fps	41,400 CUP	32.0	3,816 fps	49,200 CUP
	AR2206H	.224"	2.090"	31.0	3,594 fps	38,300 CUP	32.8	3,834 fps	46,400 CUP
	AR2208	.224"	2.090"	31.5	3,558 fps	36,500 CUP	33.5	3,788 fps	43,500 CUP
45 GR. SPR SP	AR2219	.224"	1.945"	29.0	3,409 fps	41,000 CUP	31.5	3,741 fps	49,400 CUP
	Bench Mark 2	.224"	1.945"	29.5	3,486 fps	41,100 CUP	31.6	3,702 fps	48,900 CUP
	AR2206H	.224"	1.945"	30.0	3,429 fps	41,600 CUP	32.5	3,768 fps	49,000 CUP
	AR2208	.224"	1.945"	31.5	3,502 fps	36,800 CUP	33.5	3,693 fps	43,600 CUP
50 GR. SPR SP	AR2219	.224"	1.945"	28.0	3,292 fps	37,000 CUP	30.5	3,637 fps	50,000 CUP
	Bench Mark 2	.224"	1.945"	29.5	3,398 fps	40,400 CUP	31.5	3,618 fps	49,700 CUP
	AR2206H	.224"	1.945"	29.5	3,404 fps	41,200 CUP	32.0	3,606 fps	48,000 CUP
	AR2208	.224"	1.945"	31.5	3,426 fps	38,900 CUP	33.5	3,624 fps	44,600 CUP
53 GR. HDY HP	AR2219	.224"	2.065"	28.0	3,270 fps	38,000 CUP	30.0	3,544 fps	48,400 CUP
	Bench Mark 2	.224"	2.065"	28.5	3,305 fps	41,200 CUP	30.5	3,523 fps	49,200 CUP
	AR2206H	.224"	2.065"	29.5	3,377 fps	41,900 CUP	31.5	3,566 fps	49,000 CUP
	AR2208	.224"	2.065"	31.0	3,425 fps	43,400 CUP	33.0	3,638 fps	51,100 CUP
55 GR. SPR SP	AR2219	.224"	2.050"	28.0	3,219 fps	40,000 CUP	30.0	3,439 fps	48,800 CUP
	Bench Mark 2	.224"	2.050"	28.5	3,302 fps	41,600 CUP	30.5	3,470 fps	49,600 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

22 BR Remington				Case: Remington (reformed) Twist: 1:14" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.510"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.224"	2.050"	29.0	3,212 fps	37,100 CUP	31.0	3,478 fps	49,400 CUP
	AR2208	.224"	2.050"	30.0	3,308 fps	41,600 CUP	32.5	3,530 fps	49,300 CUP
63 GR. SIE SP	AR2219	.224"	2.015"	24.0	2,962 fps	40,800 CUP	26.5	3,120 fps	48,800 CUP
	Bench Mark 2	.224"	2.015"	27.0	3,088 fps	42,000 CUP	29.0	3,270 fps	49,300 CUP
	AR2206H	.224"	2.015"	26.0	2,994 fps	41,600 CUP	28.0	3,146 fps	49,400 CUP
	AR2208	.224"	2.015"	28.5	3,134 fps	44,500 CUP	30.5	3,307 fps	49,300 CUP
70 GR. SPR SP	AR2219	.224"	1.900"	22.0	2,696 fps	40,000 CUP	24.0	2,889 fps	49,900 CUP
	Bench Mark 2	.224"	1.900"	26.0	2,919 fps	43,400 CUP	28.0	3,095 fps	49,700 CUP
	AR2206H	.224"	1.900"	23.0	2,707 fps	41,400 CUP	24.5	2,845 fps	50,000 CUP
	AR2208	.224"	1.900"	26.0	2,858 fps	43,000 CUP	28.0	3,035 fps	49,500 CUP
				Case:			Barrel length: 24"		
5.6 x 50mm Magnum (5.6 x 50Rmm)				Twist: - Primer:			Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR.	AR2206	-	-	-	-	-	29.0	3,630 fps	-
45 GR.	AR2206	-	-	-	-	-	28.5	3,550 fps	-
	AR2208	-	-	-	-	-	30.0	3,550 fps	-
50 GR.	AR2206	-	-	-	-	-	28.0	3,500 fps	-
	AR2208	-	-	-	-	-	29.5	3,500 fps	-
55 GR.	AR2206	-	-	-	-	-	27.0	3,300 fps	-
	AR2208	-	-	-	-	-	28.5	3,300 fps	-
60 GR.	AR2208	-	-	-	-	-	27.5	3,250 fps	-
70 GR.	AR2208	-	-	-	-	-	26.5	3,100 fps	-
				Case:			Barrel length: 24"		
22 Savage Hi Power (5.6 x 52Rmm)				Twist: - Primer:			Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
70 GR.	AR2207	-	-	-	-	-	21.5	2,900 fps	-
	AR2208	-	-	-	-	-	24.5	2,900 fps	-
				Case: Weatherby			Barrel length: 23"		
224 Weatherby Magnum				Twist: 1:14" Primer: Federal 210			Trim length: 1.915"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
45 GR. SIE SP	AR2206H	.224"	2.375"	29.5	3,419 fps	-	32.0	3,861 fps	-
50 GR. HDY SP	AR2206	-	-	28.5	3,215 fps	-	30.5	3,580 fps	-
	AR2206H	.224"	2.375"	28.5	3,199 fps	-	31.0	3,648 fps	-
53 GR. SIE HP	AR2206	-	-	27.5	3,050 fps	-	30.0	3,540 fps	-
	AR2206H	.224"	2.310"	27.5	3,032 fps	-	30.0	3,522 fps	-
55 GR. HDY SP	AR2206	-	-	27.0	2,940 fps	-	29.5	3,450 fps	-
	AR2206H	.224"	2.375"	27.5	2,971 fps	-	30.0	3,503 fps	-

RIFLE DATA

224 Weatherby Magnum				Case: Weatherby Twist: 1:14" Primer: Federal 210			Barrel length: 23" Trim length: 1.915"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2209	.224"	2.375"	32.0	2,879 fps	-	34.0	3,240 fps	-
	AR2213SC	.224"	2.375"	31.5	2,834 fps	-	34.0	3,200 fps	-
60 GR. HDY SP	AR2206	-	-	26.0	2,800 fps	-	28.0	3,215 fps	-
	AR2206H	.224"	2.375"	26.0	2,792 fps	-	28.0	3,205 fps	-
	AR2209	.224"	2.375"	31.0	2,832 fps	-	34.0	3,240 fps	-
	AR2213SC	.224"	2.375"	31.0	2,781 fps	-	33.5	3,041 fps	-
70 GR. SPR SP	AR2209	.224"	2.310"	30.0	2,644 fps	-	32.0	2,777 fps	-
	AR2213SC	.224"	2.310"	30.0	2,395 fps	-	32.0	2,486 fps	-
219 Donaldson Wasp				Case: Winchester Twist: 1:14" Primer: Winchester LR			Barrel length: 28" Trim length: 1.740"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR. SIE SP	AR2206H	.224"	2.130"	-	-	-	28.0	3,312 fps	-
55 GR. HDY SP	AR2206H	.224"	2.130"	-	-	-	28.0	3,501 fps	-
219 Zipper				Case: Twist: - Primer:			Barrel length: 24" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
45 GR.	AR2207	-	-	-	-	-	22.0	3,200 fps	-
	AR2206	-	-	-	-	-	25.0	3,200 fps	-
	AR2208	-	-	-	-	-	26.0	3,200 fps	-
50 GR.	AR2207	-	-	-	-	-	21.0	3,000 fps	-
	AR2206	-	-	-	-	-	24.0	3,000 fps	-
	AR2208	-	-	-	-	-	25.0	3,000 fps	-
52-53 GR.	AR2207	-	-	-	-	-	20.5	2,900 fps	-
	AR2206	-	-	-	-	-	23.5	2,900 fps	-
	AR2208	-	-	-	-	-	24.5	2,900 fps	-
55 GR.	AR2207	-	-	-	-	-	20.0	2,800 fps	-
	AR2206	-	-	-	-	-	23.0	2,800 fps	-
	AR2208	-	-	-	-	-	24.0	2,800 fps	-

RIFLE DATA

225 Winchester				Case: Winchester Twist: 1:14" Primer: Winchester LR			Barrel length: 26" Trim length: 1.920"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
40 GR. SPR SP	AR2219	.224"	2.370"	28.0	3,628 fps	39,700 CUP	31.0	3,896 fps	49,800 CUP
	AR2206	-	-	30.0	3,435 fps	-	33.0	3,780 fps	-
	AR2206H	.224"	2.370"	31.5	3,583 fps	39,600 CUP	34.0	3,811 fps	48,200 CUP
45 GR. HDY SP	AR2219	.224"	2.425"	27.0	3,303 fps	36,500 CUP	30.0	3,685 fps	50,000 CUP
	AR2206	-	-	29.0	3,345 fps	-	32.0	3,690 fps	-
	AR2206H	.224"	2.425"	31.0	3,504 fps	39,600 CUP	33.5	3,736 fps	49,300 CUP
50 GR. SIE SP	AR2219	.224"	2.400"	26.0	3,164 fps	37,500 CUP	29.0	3,401 fps	48,900 CUP
	AR2206	-	-	29.0	3,340 fps	-	32.0	3,685 fps	-
	AR2206H	.224"	2.400"	31.0	3,330 fps	38,400 CUP	34.0	3,722 fps	48,400 CUP
52 GR. SPR SP	AR2219	.224"	2.500"	26.0	3,128 fps	39,200 CUP	28.5	3,333 fps	48,000 CUP
	AR2206	-	-	28.0	3,110 fps	-	31.0	3,445 fps	-
	AR2206H	.224"	2.500"	29.5	3,239 fps	37,200 CUP	32.0	3,463 fps	49,600 CUP
55 GR. HDY SP	AR2219	.224"	2.420"	25.5	3,052 fps	38,600 CUP	28.0	3,283 fps	48,900 CUP
	AR2206	-	-	27.5	3,070 fps	-	30.5	3,405 fps	-
	AR2206H	.224"	2.420"	29.5	3,159 fps	36,000 CUP	32.0	3,476 fps	48,000 CUP
	AR2209	.224"	2.420"	35.0	2,970 fps	37,600 CUP	37.0	3,189 fps	46,000 CUP
60 GR. HDY SP	AR2206	-	-	27.0	3,040 fps	-	30.0	3,380 fps	-
	AR2206H	.224"	2.410"	29.0	3,125 fps	43,200 CUP	32.0	3,396 fps	49,000 CUP
	AR2209	.224"	2.410"	34.0	2,911 fps	37,000 CUP	36.0	3,120 fps	44,400 CUP
70 GR. SPR SP	AR2209	.224"	2.310"	32.0	2,696 fps	39,100 CUP	35.0	2,949 fps	47,800 CUP
22-250 Remington				Case: Winchester Twist: 1:14" Primer: Winchester LR			Barrel length: 24" Trim length: 1.902"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. NOS LF	Bench Mark 2	.224"	2.350"	35.7	4,170 fps	48,700 PSI	38.0	4,476 fps	62,600 PSI
	Bench Mark 8208	.224"	2.350"	35.1	4,096 fps	46,900 PSI	39.0	4,469 fps	60,700 PSI
	AR2206H	.224"	2.350"	34.1	4,120 fps	47,200 PSI	37.5C	4,432 fps	58,200 PSI
	AR2208	.224"	2.350"	35.6	3,929 fps	42,900 PSI	39.5C	4,421 fps	61,000 PSI
36 GR. BAR VG FB	Bench Mark 2	.224"	2.350"	35.6	4,108 fps	51,700 PSI	37.8	4,335 fps	61,100 PSI
	Bench Mark 8208	.224"	2.350"	36.5	4,137 fps	50,700 PSI	38.8	4,404 fps	62,300 PSI
	AR2206H	.224"	2.350"	36.6	4,130 fps	50,700 PSI	39.0C	4,376 fps	61,400 PSI
	AR2208	.224"	2.350"	37.8	4,061 fps	50,800 PSI	40.2C	4,277 fps	59,800 PSI
40 GR. NOS BT	Bench Mark 2	.224"	2.350"	34.0	3,837 fps	41,600 CUP	36.5	4,114 fps	50,100 CUP
	Bench Mark 8208	.224"	2.350"	35.0	3,944 fps	47,000 PSI	39.0	4,336 fps	63,500 PSI
40 GR.	AR2206	-	-	34.0	3,780 fps	-	37.0	4,175 fps	-
40 GR. NOS BT	AR2206H	.224"	2.350"	34.0	3,750 fps	43,800 CUP	37.0	4,060 fps	48,700 CUP
	AR2208	.224"	2.350"	37.5	3,936 fps	43,400 CUP	39.5	4,135 fps	51,100 CUP
45 GR. BAR XBT	AR2219	.224"	2.340"	31.0	3,490 fps	44,600 CUP	32.5	3,720 fps	48,500 CUP
	Bench Mark 2	.224"	2.340"	33.5	3,786 fps	45,300 CUP	36.0	3,979 fps	51,000 CUP
	AR2206H	.224"	2.340"	34.0	3,660 fps	47,300 CUP	37.0	3,918 fps	49,100 CUP
	AR2208	.224"	2.340"	35.0	3,652 fps	46,000 CUP	38.0	3,921 fps	49,200 CUP
50 GR. SIE SP	AR2219	.224"	2.350"	30.0	3,441 fps	46,200 CUP	32.0	3,628 fps	50,300 CUP
	Bench Mark 2	.224"	2.350"	33.5	3,718 fps	45,900 CUP	36.0	3,903 fps	51,400 CUP
	Bench Mark 8208	.224"	2.350"	33.0	3,728 fps	55,200 PSI	36.0	3,925 fps	62,900 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

22-250 Remington				Case: Winchester Twist: 1:14" Primer: Winchester LR			Barrel length: 24" Trim length: 1.902"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
50 GR.	AR2206	-	-	33.5	3,565 fps	-	36.0	3,830 fps	-
50 GR. SIE SP	AR2206H	.224"	2.350"	33.5	3,530 fps	43,800 CUP	36.5	3,827 fps	50,200 CUP
	AR2208	.224"	2.350"	34.5	3,596 fps	43,600 CUP	37.5	3,834 fps	50,400 CUP
	AR2209	.224"	2.350"	39.0	3,410 fps	43,600 CUP	42.0	3,579 fps	48,900 CUP
52 GR. HDY A-MAX	AR2219	.224"	2.350"	29.0	3,379 fps	45,500 CUP	31.0	3,498 fps	48,000 CUP
	Bench Mark 2	.224"	2.350"	32.5	3,602 fps	45,800 CUP	34.6	3,755 fps	49,800 CUP
	Bench Mark 8208	.224"	2.350"	32.5	3,612 fps	52,200 PSI	35.5	3,837 fps	60,100 PSI
52 GR.	AR2206	-	-	32.5	3,505 fps	-	35.0	3,750 fps	-
52 GR. HDY A-MAX	AR2206H	.224"	2.350"	32.5	3,467 fps	44,400 CUP	35.5	3,729 fps	49,600 CUP
	AR2208	.224"	2.350"	34.0	3,630 fps	45,500 CUP	36.0	3,784 fps	50,000 CUP
	AR2209	.224"	2.350"	39.0	3,402 fps	43,800 CUP	41.0	3,557 fps	49,400 CUP
55 GR. SPR SP	Trail Boss	.224"	2.350"	9.1	1,664 fps	17,200 PSI	13.0	1,984 fps	26,600 PSI
	AR2219	.224"	2.350"	28.0	3,339 fps	46,200 CUP	30.0	3,480 fps	49,800 CUP
	Bench Mark 2	.224"	2.350"	31.6	3,532 fps	46,200 CUP	33.6	3,674 fps	50,200 CUP
	Bench Mark 8208	.224"	2.350"	32.0	3,514 fps	52,300 PSI	35.8	3,768 fps	62,700 PSI
55 GR.	AR2206	-	-	32.5	3,415 fps	-	35.0	3,680 fps	-
55 GR. SPR SP	AR2206H	.224"	2.350"	32.5	3,446 fps	45,000 CUP	35.5	3,670 fps	49,300 CUP
	AR2208	.224"	2.350"	34.0	3,490 fps	46,100 CUP	36.5	3,664 fps	50,400 CUP
	AR2209	.224"	2.350"	37.0	3,296 fps	46,400 CUP	39.0	3,490 fps	47,800 CUP
60 GR. HDY V-MAX	AR2219	.224"	2.350"	29.0	3,222 fps	50,900 PSI	31.5	3,434 fps	62,000 PSI
	Bench Mark 2	.224"	2.350"	29.0	3,183 fps	49,000 PSI	32.0	3,406 fps	59,900 PSI
	Bench Mark 8208	.224"	2.350"	31.5	3,412 fps	55,600 PSI	34.0	3,550 fps	61,000 PSI
	AR2206H	.224"	2.350"	32.0	3,340 fps	51,700 PSI	35.0	3,551 fps	61,300 PSI
	AR2208	.224"	2.350"	33.0	3,318 fps	52,200 PSI	35.8	3,503 fps	60,400 PSI
	AR2209	.224"	2.350"	39.0	3,374 fps	51,600 PSI	41.5C	3,570 fps	60,500 PSI
62 GR. BAR TAC-X BT	Bench Mark 8208	.224"	2.385"	31.6	3,367 fps	52,400 PSI	34.0	3,554 fps	62,400 PSI
	AR2206H	.224"	2.385"	31.9	3,467 fps	57,800 PSI	34.0	3,564 fps	60,900 PSI
	AR2208	.224"	2.385"	32.9	3,354 fps	54,200 PSI	35.0	3,500 fps	60,400 PSI
63 GR. SIE SP	Bench Mark 8208	.224"	2.350"	30.0	3,256 fps	52,400 PSI	33.0	3,459 fps	62,100 PSI
	AR2206H	.224"	2.350"	31.5	3,317 fps	47,300 CUP	34.0	3,486 fps	50,400 CUP
	AR2208	.224"	2.350"	29.5	3,039 fps	39,500 CUP	34.0	3,426 fps	50,400 CUP
	AR2209	.224"	2.350"	36.0	3,210 fps	45,400 CUP	38.0	3,391 fps	48,000 CUP
70 GR. SPR SP	Bench Mark 8208	.224"	2.230"	28.0	3,015 fps	49,800 PSI	31.0	3,246 fps	61,600 PSI
70 GR.	AR2206	-	-	28.0	3,000 fps	-	30.0	3,180 fps	-
70 GR. SPR SP	AR2206H	.224"	2.330"	28.0	2,933 fps	43,000 CUP	31.5	3,196 fps	50,700 CUP
	AR2208	.224"	2.330"	29.5	3,006 fps	44,700 CUP	32.0	3,196 fps	50,300 CUP
	AR2209	.224"	2.330"	34.0	3,007 fps	44,800 CUP	36.0	3,129 fps	49,600 CUP
	AR2213SC	.224"	2.330"	35.0	2,976 fps	42,000 CUP	38.0	3,189 fps	50,300 CUP
	AR2217	.224"	2.330"	36.0	3,042 fps	41,100 CUP	38.0	3,187 fps	47,500 CUP

RIFLE DATA

22-250 Improved (Ackley)				Case:		Barrel length: 26"			
				Twist: -		Trim length: -			
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
50 GR.	AR2206	-	-	-	-	-	36.5	3,800 fps	-
	AR2208	-	-	-	-	-	39.0	3,800 fps	-
	AR2209	-	-	-	-	-	42.5	3,800 fps	-
52-53 GR.	AR2206	-	-	-	-	-	35.5	3,750 fps	-
	AR2208	-	-	-	-	-	38.0	3,750 fps	-
	AR2209	-	-	-	-	-	41.0	3,750 fps	-
55 GR.	AR2206	-	-	-	-	-	34.5	3,650 fps	-
	AR2208	-	-	-	-	-	37.0	3,650 fps	-
	AR2209	-	-	-	-	-	40.0	3,650 fps	-
60-63 GR.	AR2206	-	-	-	-	-	32.5	3,500 fps	-
	AR2208	-	-	-	-	-	35.0	3,500 fps	-
	AR2209	-	-	-	-	-	38.0	3,500 fps	-
68-70 GR.	AR2206	-	-	-	-	-	31.5	3,400 fps	-
	AR2208	-	-	-	-	-	34.0	3,400 fps	-
	AR2209	-	-	-	-	-	37.0	3,400 fps	-
220 Swift				Case: Winchester		Barrel length: 24"			
				Twist: 1:14"		Trim length: 2.195"			
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. NOS LF	AR2206H	.224"	2.680"	37.6	4,171 fps	47,400 CUP	40.0	4,401 fps	52,300 CUP
	AR2208	.224"	2.680"	38.5	4,035 fps	43,500 CUP	41.0	4,251 fps	51,100 CUP
36 GR. BAR VG FB	Bench Mark 8208	.224"	2.635"	38.0	4,078 fps	46,800 CUP	40.0	4,296 fps	53,000 CUP
	AR2206H	.224"	2.635"	37.6	4,002 fps	44,300 CUP	40.0	4,251 fps	50,800 CUP
	AR2208	.224"	2.635"	40.0	4,076 fps	44,600 CUP	42.5	4,306 fps	50,900 CUP
40 GR.	AR2206	-	-	36.0	3,680 fps	-	38.0	3,950 fps	-
40 GR. SIE HP	AR2206H	.224"	2.680"	37.0	3,768 fps	41,400 CUP	40.0	4,126 fps	52,000 CUP
	AR2208	.224"	2.680"	38.0	4,007 fps	49,800 CUP	40.5	4,113 fps	49,800 CUP
45 GR.	AR2206	-	-	36.0	3,650 fps	-	37.5	3,800 fps	-
45 GR. HDY SP	AR2206H	.224"	2.680"	36.5	3,676 fps	38,400 CUP	39.5	3,996 fps	52,100 CUP
	AR2208	.224"	2.680"	36.0	3,777 fps	47,100 CUP	40.2	4,002 fps	52,100 CUP
50 GR.	AR2206	-	-	35.0	3,470 fps	-	38.5	3,920 fps	-
50 GR. HDY SP	AR2206H	.224"	2.680"	35.0	3,460 fps	39,000 CUP	38.0	3,840 fps	51,200 CUP
	AR2208	.224"	2.680"	34.5	3,616 fps	47,200 CUP	36.0	3,770 fps	50,200 CUP
52 GR. SIE HPBT	AR2206H	.224"	2.680"	33.8	3,588 fps	45,100 CUP	36.0	3,736 fps	50,000 CUP
	AR2208	.224"	2.680"	34.0	3,516 fps	42,700 CUP	36.5	3,687 fps	50,300 CUP
55 GR. HDY SP	AR2206H	.224"	2.680"	34.0	3,481 fps	45,900 CUP	37.0	3,698 fps	52,000 CUP
	AR2208	.224"	2.680"	34.0	3,516 fps	47,000 CUP	36.0	3,645 fps	51,900 CUP
	AR2209	.224"	2.680"	39.0	3,225 fps	42,000 CUP	42.0	3,619 fps	50,800 CUP
	AR2213SC	.224"	2.680"	41.5	3,194 fps	36,600 CUP	46.0	3,616 fps	46,600 CUP
60 GR. NOS PART	AR2206H	.224"	2.680"	30.5	3,165 fps	39,200 CUP	33.5	3,401 fps	49,600 CUP
	AR2208	.224"	2.680"	33.0	3,242 fps	40,000 CUP	36.0	3,473 fps	49,000 CUP
	AR2209	.224"	2.680"	37.0	3,230 fps	39,800 CUP	41.0	3,527 fps	50,600 CUP
	AR2213SC	.224"	2.680"	41.5	3,252 fps	41,600 CUP	46.0C	3,556 fps	51,800 CUP
62 GR. BAR TAC-X BT	AR2206H	.224"	2.680"	31.7	3,121 fps	45,700 CUP	33.7	3,364 fps	51,400 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

220 Swift				Case: Winchester			Barrel length: 24"		
				Twist: 1:14"			Trim length: 2.195"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2208	.224"	2.680"	32.3	3,161 fps	44,100 CUP	34.3	3,315 fps	50,400 CUP
	AR2209	.224"	2.680"	37.2	3,177 fps	43,500 CUP	40.5C	3,389 fps	52,400 CUP
63 GR. SIE SP	AR2206H	.224"	2.680"	32.5	3,218 fps	40,800 CUP	35.5	3,484 fps	51,000 CUP
	AR2208	.224"	2.680"	32.0	3,181 fps	42,200 CUP	34.0	3,407 fps	49,300 CUP
	AR2209	.224"	2.680"	37.0	3,181 fps	46,000 CUP	39.0	3,474 fps	52,000 CUP
	AR2213SC	.224"	2.680"	41.5	3,180 fps	37,200 CUP	46.0	3,586 fps	52,000 CUP
70 GR. SPR SP	AR2208	.224"	2.680"	31.0	3,103 fps	46,500 CUP	33.0	3,247 fps	49,900 CUP
	AR2209	.224"	2.680"	36.0	3,027 fps	45,200 CUP	38.0	3,313 fps	51,200 CUP
	AR2213SC	.224"	2.680"	37.0	2,991 fps	45,800 CUP	42.0	3,359 fps	52,600 CUP
	AR2217	.224"	2.680"	42.0	3,149 fps	43,800 CUP	44.0	3,317 fps	50,200 CUP
220 Jaybird				Case: Winchester (reformed)			Barrel length: 26"		
				Twist: 1:10"			Trim length: 1.990"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
52 GR. HDY BTHP	AR2209	.224"	2.450"	43.0	3,508 fps	-	47.0	3,992 fps	-
55 GR. SPR SP	AR2209	.224"	2.350"	43.0	3,509 fps	-	47.0	3,981 fps	-
60 GR. HDY HP	AR2209	.224"	2.450"	41.0	3,235 fps	-	45.0	3,763 fps	-
	AR2213SC	.224"	2.450"	43.0	3,362 fps	-	47.0	3,772 fps	-
69 GR. SIE HP	AR2213SC	.224"	2.450"	43.0	3,318 fps	-	47.0	3,654 fps	-
5.6 X 57mm RWS (5.6 x 57Rmm)				Case:			Barrel length: 26"		
				Twist: -			Trim length: -		
				Primer:					
WARNING: If reloading old style thick walled brass reduce these loads by at least 4 grains to avoid dangerous pressures.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
50 GR.	AR2208	-	-	-	-	-	37.0	3,700 fps	-
	AR2209	-	-	-	-	-	41.0	3,700 fps	-
55 GR.	AR2208	-	-	-	-	-	36.0	3,550 fps	-
	AR2209	-	-	-	-	-	40.0	3,550 fps	-
60 GR.	AR2208	-	-	-	-	-	35.0	3,450 fps	-
	AR2209	-	-	-	-	-	39.0	3,450 fps	-
69-70 GR.	AR2208	-	-	-	-	-	34.0	3,300 fps	-
	AR2209	-	-	-	-	-	38.0	3,300 fps	-
74 GR.	AR2209	-	-	-	-	-	37.0	3,250 fps	-

RIFLE DATA

22 Cheetah Mark II				Case: Winchester Twist: 1:10" Primer: Winchester SR			Barrel length: 27" Trim length: 2.010"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
50 GR. HDY SP	AR2209	.224"	2.580"	46.0	3,901 fps	-	51.0	4,069 fps	-
55 GR. SIE SP	AR2209	.224"	2.580"	46.0	3,776 fps	-	51.0	4,017 fps	-
223 Winchester Super Short Magnum				Case: Winchester Twist: 1:8" Primer: Winchester LR			Barrel length: 24" Trim length: 1.660"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
35 GR. NOS LF	Bench Mark 8208	.224"	2.200"	38.0	4,051 fps	49,400 PSI	42.7	4,439 fps	62,700 PSI
	AR2206H	.224"	2.200"	38.0	4,041 fps	48,300 PSI	43.0	4,438 fps	62,000 PSI
	AR2208	.224"	2.200"	39.0	4,027 fps	50,000 PSI	43.5	4,364 fps	62,500 PSI
36 GR. BAR VG FB	Bench Mark 8208	.224"	2.120"	37.0	4,014 fps	48,300 PSI	41.5	4,400 fps	63,100 PSI
	AR2206H	.224"	2.120"	37.0	4,037 fps	48,100 PSI	41.5	4,417 fps	62,600 PSI
	AR2208	.224"	2.120"	39.0	4,086 fps	51,300 PSI	43.2	4,368 fps	62,400 PSI
40 GR. NOS BT	Bench Mark 8208	.224"	2.200"	40.0	4,110 fps	52,900 PSI	42.5	4,307 fps	62,600 PSI
	AR2206H	.224"	2.200"	40.4	4,121 fps	54,300 PSI	43.0	4,320 fps	62,900 PSI
	AR2208	.224"	2.200"	41.0	4,074 fps	54,100 PSI	43.5	4,278 fps	63,800 PSI
45 GR. BAR X	AR2206H	.224"	2.100"	40.0	3,951 fps	51,200 PSI	42.8	4,153 fps	61,900 PSI
	AR2208	.224"	2.100"	40.7	3,935 fps	51,400 PSI	43.3	4,136 fps	61,800 PSI
	AR2209	.224"	2.100"	47.0	3,887 fps	54,100 PSI	50.0C	4,131 fps	63,000 PSI
50 GR. BAR XLC	AR2206H	.224"	2.100"	40.0	3,805 fps	51,600 PSI	42.9	4,021 fps	62,700 PSI
	AR2208	.224"	2.100"	41.0	3,784 fps	50,500 PSI	44.0	4,015 fps	61,800 PSI
	AR2209	.224"	2.100"	47.0	3,781 fps	50,200 PSI	50.0C	4,023 fps	61,500 PSI
52 GR. SPR HPBT	Bench Mark 8208	.224"	2.150"	37.8	3,721 fps	55,200 PSI	40.2	3,894 fps	62,500 PSI
	AR2206H	.224"	2.150"	38.8	3,805 fps	54,400 PSI	41.3	3,948 fps	61,600 PSI
	AR2208	.224"	2.150"	40.0	3,758 fps	54,000 PSI	43.0	3,948 fps	63,600 PSI
	AR2209	.224"	2.150"	46.0	3,753 fps	51,500 PSI	49.0C	3,959 fps	62,300 PSI
55 GR. HDY V-MAX	Bench Mark 8208	.224"	2.200"	35.3	3,557 fps	54,600 PSI	37.6	3,715 fps	62,000 PSI
	AR2206H	.224"	2.200"	36.5	3,622 fps	53,200 PSI	39.0	3,798 fps	62,100 PSI
	AR2208	.224"	2.200"	38.0	3,651 fps	53,300 PSI	40.5	3,836 fps	62,100 PSI
	AR2209	.224"	2.200"	44.5	3,713 fps	55,900 PSI	47.5	3,881 fps	63,100 PSI
	AR2213SC	.224"	2.200"	46.0	3,579 fps	53,000 PSI	49.0C	3,743 fps	62,600 PSI
60 GR. NOS PART	Bench Mark 8208	.224"	2.150"	32.9	3,383 fps	56,100 PSI	35.0	3,524 fps	62,100 PSI
	AR2206H	.224"	2.150"	35.0	3,479 fps	53,700 PSI	37.3	3,625 fps	62,200 PSI
	AR2208	.224"	2.150"	36.0	3,510 fps	55,400 PSI	38.5	3,656 fps	61,400 PSI
	AR2209	.224"	2.150"	41.0	3,568 fps	57,800 PSI	43.8	3,723 fps	63,400 PSI
	AR2213SC	.224"	2.150"	43.5	3,522 fps	58,300 PSI	46.3C	3,661 fps	63,500 PSI
69 GR. SIE HPBT	AR2206H	.224"	2.230"	34.5	3,278 fps	56,500 PSI	36.8	3,426 fps	61,800 PSI
	AR2208	.224"	2.230"	36.0	3,324 fps	55,900 PSI	38.5	3,492 fps	62,900 PSI
	AR2209	.224"	2.230"	40.0	3,321 fps	52,400 PSI	42.5	3,505 fps	63,300 PSI
	AR2213SC	.224"	2.230"	43.5	3,312 fps	54,700 PSI	46.5C	3,489 fps	63,200 PSI
	AR2217	.224"	2.230"	46.8	3,329 fps	53,700 PSI	49.8C	3,472 fps	60,100 PSI
75 GR. HDY V-MAX	AR2206H	.224"	2.360"	33.0	3,119 fps	56,200 PSI	35.2	3,266 fps	61,200 PSI
	AR2208	.224"	2.360"	34.5	3,174 fps	55,200 PSI	36.8	3,330 fps	61,700 PSI
	AR2209	.224"	2.360"	39.0	3,227 fps	57,900 PSI	41.5	3,376 fps	63,700 PSI
	AR2213SC	.224"	2.360"	42.0	3,201 fps	56,500 PSI	45.1	3,352 fps	63,200 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

223 Winchester Super Short Magnum				Case: Winchester Twist: 1:8" Primer: Winchester LR			Barrel length: 24" Trim length: 1.660"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2217	.224"	2.360"	46.0	3,250 fps	55,900 PSI	49.0C	3,378 fps	62,400 PSI
77 GR. SIE HPBT	AR2206H	.224"	2.230"	32.0	3,048 fps	58,100 PSI	34.2	3,196 fps	62,700 PSI
	AR2208	.224"	2.230"	33.5	3,099 fps	59,100 PSI	35.8	3,249 fps	63,000 PSI
	AR2209	.224"	2.230"	37.0	3,135 fps	54,600 PSI	39.5	3,289 fps	61,000 PSI
	AR2213SC	.224"	2.230"	40.5	3,159 fps	57,600 PSI	43.3	3,299 fps	62,700 PSI
	AR2217	.224"	2.230"	44.5	3,221 fps	57,400 PSI	47.7C	3,359 fps	63,500 PSI
6mm-222				Case: Remington (reformed) Twist: 1:9" Primer: Remington 7 1/2			Barrel length: 23.5" Trim length: 1.690"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. SIE HP	AR2207	.243"	2.200"	17.0	2,792 fps	37,800 CUP	19.0	3,023 fps	48,500 CUP
	AR2206H	.243"	2.200"	21.5	2,748 fps	42,000 CUP	23.5	3,043 fps	50,200 CUP
75 GR. HDY HP	AR2207	.243"	2.200"	16.0	2,469 fps	36,600 CUP	18.0	2,718 fps	47,600 CUP
	AR2206H	.243"	2.200"	20.0	2,443 fps	39,600 CUP	22.0	2,660 fps	46,700 CUP
85 GR. SPR SP	AR2207	.243"	2.260"	14.5	2,292 fps	37,800 CUP	16.5	2,514 fps	47,600 CUP
	AR2206H	.243"	2.260"	19.5	2,375 fps	42,400 CUP	20.5	2,505 fps	49,600 CUP
100 GR. HDY SP	AR2207	.243"	2.260"	13.0	1,912 fps	36,000 CUP	15.0	2,090 fps	46,300 CUP
	AR2206H	.243"	2.260"	17.0	1,998 fps	36,000 CUP	19.0	2,212 fps	49,100 CUP
6 x 45mm (6mm-223)				Case: Remington (reformed) Twist: 1:9" Primer: Federal 205M			Barrel length: 24" Trim length: 1.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. SIE HP	AR2219	.243"	2.260"	23.0	2,849 fps	39,500 CUP	25.0	3,097 fps	47,000 CUP
	Bench Mark 2	.243"	2.260"	24.0	2,636 fps	32,000 CUP	27.0C	3,042 fps	41,600 CUP
	AR2206H	.243"	2.260"	25.5	2,872 fps	40,000 CUP	27.5C	3,102 fps	48,500 CUP
62 GR. BAR VG	Bench Mark 2	.243"	2.350"	24.0	2,726 fps	36,400 CUP	27.0C	3,064 fps	49,400 CUP
	Bench Mark 8208	.243"	2.350"	24.0	2,636 fps	33,000 CUP	27.0C	3,019 fps	44,600 CUP
70 GR. HDY SP	AR2219	.243"	2.260"	23.0	2,758 fps	39,800 CUP	25.0	2,985 fps	47,500 CUP
	Bench Mark 2	.243"	2.260"	24.0	2,609 fps	45,200 CUP	27.0C	2,962 fps	45,200 CUP
	Bench Mark 8208	.243"	2.260"	24.0	2,555 fps	32,000 CUP	27.0C	2,916 fps	41,200 CUP
	AR2206H	.243"	2.260"	25.5	2,809 fps	44,000 CUP	27.5	3,034 fps	49,500 CUP
75 GR. HDY HP	AR2219	.243"	2.260"	23.0	2,774 fps	45,500 CUP	24.0	2,860 fps	47,500 CUP
	Bench Mark 2	.243"	2.260"	24.0	2,587 fps	34,200 CUP	27.0C	2,923 fps	47,200 CUP
	Bench Mark 8208	.243"	2.260"	24.0	2,513 fps	31,400 CUP	27.0C	2,882 fps	44,500 CUP
	AR2206H	.243"	2.260"	25.0	2,704 fps	39,300 CUP	27.0C	2,952 fps	48,000 CUP
80 GR. SPR SP	AR2219	.243"	2.350"	21.5	2,503 fps	37,600 CUP	23.5	2,783 fps	47,500 CUP
	Bench Mark 2	.243"	2.350"	24.0	2,608 fps	36,400 CUP	27.0C	2,919 fps	48,600 CUP
	Bench Mark 8208	.243"	2.350"	24.0	2,576 fps	34,400 CUP	27.0C	2,867 fps	44,200 CUP
	AR2206H	.243"	2.350"	25.0	2,689 fps	40,900 CUP	27.0C	2,904 fps	48,500 CUP
85 GR. SPR SP	AR2219	.243"	2.350"	21.5	2,480 fps	41,500 CUP	23.5	2,695 fps	49,000 CUP
	Bench Mark 2	.243"	2.350"	23.0	2,518 fps	35,800 CUP	26.2C	2,829 fps	49,300 CUP
	Bench Mark 8208	.243"	2.350"	23.5	2,525 fps	34,800 CUP	26.5C	2,842 fps	48,000 CUP

RIFLE DATA

6 x 45mm (6mm-223)				Case: Remington (reformed)			Barrel length: 24"		
				Twist: 1:9"			Trim length: 1.750"		
				Primer: Federal 205M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SPR SP	AR2206H	.243"	2.350"	24.0	2,559 fps	39,300 CUP	26.0C	2,786 fps	49,000 CUP
	AR2219	.243"	2.350"	20.5	2,391 fps	41,000 CUP	22.5	2,531 fps	49,500 CUP
	Bench Mark 2	.243"	2.350"	23.0	2,453 fps	36,600 CUP	26.0C	2,739 fps	48,900 CUP
	Bench Mark 8208	.243"	2.350"	23.0	2,438 fps	35,600 CUP	26.0C	2,729 fps	46,300 CUP
	AR2206H	.243"	2.350"	23.5	2,509 fps	41,500 CUP	25.5	2,721 fps	50,000 CUP
100 GR. HDY SP	Bench Mark 2	.243"	2.340"	23.5	2,456 fps	43,900 CUP	24.5C	2,546 fps	48,700 CUP
	Bench Mark 8208	.243"	2.340"	23.0	2,365 fps	38,300 CUP	25.0C	2,558 fps	46,200 CUP
	AR2206H	.243"	2.340"	22.0	2,414 fps	42,000 CUP	24.0C	2,616 fps	50,000 CUP
6 x 47mm				Case: Federal			Barrel length: 23.5"		
				Twist: 1:14"			Trim length: 1.840"		
				Primer: Federal 205M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. SIE HP	AR2207	.243"	2.400"	22.0	2,895 fps	35,400 CUP	24.0	3,170 fps	49,800 CUP
60 GR.	Bench Mark 1	-	-	25.0	2,955 fps	-	27.0	3,180 fps	-
60 GR. SIE HP	AR2219	.243"	2.400"	26.0	3,040 fps	38,100 CUP	28.0	3,222 fps	44,500 CUP
60 GR.	AR2206	-	-	26.0	2,950 fps	-	28.0	3,110 fps	-
60 GR. SIE HP	AR2206H	.243"	2.400"	26.0	2,919 fps	35,600 CUP	28.5	3,098 fps	43,100 CUP
70 GR. HDY SP	AR2207	.243"	2.445"	21.0	2,726 fps	39,300 CUP	23.0	2,944 fps	49,400 CUP
70 GR.	Bench Mark 1	-	-	24.5	2,785 fps	-	27.0	2,990 fps	-
70 GR. HDY SP	AR2219	.243"	2.445"	26.0	2,935 fps	43,000 CUP	28.0	3,116 fps	49,800 CUP
70 GR.	AR2206	-	-	26.0	2,840 fps	-	28.0	2,970 fps	-
70 GR. HDY SP	AR2206H	.243"	2.445"	26.0	2,745 fps	37,600 CUP	28.0	2,915 fps	44,700 CUP
75 GR. SPR HP	AR2207	.243"	2.445"	20.5	2,664 fps	41,500 CUP	22.5	2,852 fps	48,900 CUP
75 GR.	Bench Mark 1	-	-	23.5	2,680 fps	-	25.5	2,890 fps	-
75 GR. SPR HP	AR2219	.243"	2.445"	24.0	2,698 fps	40,300 CUP	26.0	2,958 fps	48,400 CUP
75 GR.	AR2206	-	-	25.0	2,670 fps	-	27.0	2,870 fps	-
75 GR. SPR HP	AR2206H	.243"	2.445"	25.5	2,709 fps	38,200 CUP	27.5	2,911 fps	47,500 CUP
80 GR. SPR SP	AR2207	.243"	2.440"	20.0	2,527 fps	39,800 CUP	22.0	2,700 fps	46,900 CUP
80 GR.	Bench Mark 1	-	-	21.0	2,550 fps	-	23.0	2,750 fps	-
80 GR. SPR SP	AR2219	.243"	2.440"	23.5	2,604 fps	41,400 CUP	25.5	2,808 fps	48,000 CUP
80 GR.	AR2206	-	-	24.0	2,495 fps	-	26.0	2,705 fps	-
80 GR. SPR SP	AR2206H	.243"	2.440"	25.0	2,622 fps	40,400 CUP	27.0	2,860 fps	49,800 CUP
85 GR. SPR SP	AR2207	.243"	2.440"	19.5	2,400 fps	37,100 CUP	21.5	2,571 fps	46,900 CUP
	AR2219	.243"	2.440"	23.0	2,514 fps	40,800 CUP	25.0	2,713 fps	48,000 CUP
	AR2206H	.243"	2.440"	24.0	2,483 fps	39,800 CUP	26.0	2,712 fps	49,400 CUP

RIFLE DATA

6mm PPC				Case: Sako (reformed)			Barrel length: 24"		
				Twist: 1:14"			Trim length: 1.510"		
				Primer: Remington 7 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT	AR2207	.243"	2.100"	25.0	3,281 fps	42,300 CUP	26.7	3,443 fps	50,200 CUP
	AR2219	.243"	2.100"	27.5	3,161 fps	39,100 CUP	29.5	3,390 fps	49,600 CUP
	Bench Mark 2	.243"	2.100"	28.0	3,206 fps	42,100 CUP	30.0	3,405 fps	50,000 CUP
58 GR. HDY V-MAX	AR2207	.243"	2.075"	24.0	3,109 fps	40,200 CUP	25.7	3,349 fps	49,300 CUP
	AR2219	.243"	2.075"	27.0	3,161 fps	42,500 CUP	29.0	3,355 fps	50,600 CUP
	Bench Mark 2	.243"	2.075"	27.7	3,118 fps	39,800 CUP	29.5	3,322 fps	50,000 CUP
	Bench Mark 8208	.243"	2.075"	27.5	3,084 fps	39,400 CUP	30.0C	3,353 fps	49,800 CUP
60 GR. SIE HP	AR2207	.243"	2.080"	21.0	2,856 fps	46,500 CUP	23.0	2,973 fps	49,500 CUP
60 GR.	Bench Mark 1	-	-	24.0	2,920 fps	-	25.5	3,100 fps	-
60 GR. SIE HP	AR2219	.243"	2.080"	26.0	3,090 fps	45,000 CUP	27.0	3,165 fps	47,000 CUP
	Bench Mark 2	.243"	2.080"	26.0	2,909 fps	36,100 CUP	29.0	3,236 fps	48,600 CUP
	Bench Mark 8208	.243"	2.080"	27.0	3,053 fps	40,000 CUP	30.0C	3,334 fps	51,100 CUP
60 GR.	AR2206	-	-	27.0	3,060 fps	-	29.0	3,280 fps	-
60 GR. SIE HP	AR2206H	.243"	2.080"	27.0	2,913 fps	44,500 CUP	29.0	3,218 fps	48,500 CUP
	AR2208	.243"	2.080"	27.0	2,901 fps	40,200 CUP	29.0	3,076 fps	44,100 CUP
65 GR. HDY V-MAX	AR2207	.243"	2.075"	23.5	3,011 fps	41,700 CUP	25.5	3,218 fps	50,500 CUP
	AR2219	.243"	2.075"	26.3	2,984 fps	38,900 CUP	28.0	3,178 fps	49,400 CUP
	Bench Mark 2	.243"	2.075"	26.6	3,003 fps	42,700 CUP	28.3	3,159 fps	49,800 CUP
	Bench Mark 8208	.243"	2.140"	27.0	3,064 fps	42,300 CUP	29.5C	3,253 fps	50,900 CUP
70 GR. NOS BT	AR2207	.243"	2.100"	21.0	2,745 fps	47,000 CUP	22.0	2,839 fps	50,400 CUP
70 GR.	Bench Mark 1	-	-	24.0	2,780 fps	-	26.0	3,010 fps	-
70 GR. NOS BT	AR2219	.243"	2.100"	25.0	2,967 fps	46,500 CUP	26.5	3,068 fps	50,000 CUP
	Bench Mark 2	.243"	2.100"	26.0	2,803 fps	35,500 CUP	29.0	3,149 fps	50,500 CUP
	Bench Mark 8208	.243"	2.100"	27.0	2,900 fps	47,400 CUP	29.5C	3,193 fps	50,300 CUP
70 GR.	AR2206	-	-	26.0	2,780 fps	-	29.0	3,100 fps	-
70 GR. NOS BT	AR2206H	.243"	2.100"	26.0	2,714 fps	42,000 CUP	28.0	3,034 fps	46,500 CUP
	AR2208	.243"	2.100"	27.0	2,845 fps	39,800 CUP	29.0	3,034 fps	48,000 CUP
75 GR. SPR HP	AR2207	.243"	2.115"	20.0	2,661 fps	45,500 CUP	21.0	2,780 fps	49,000 CUP
75 GR.	Bench Mark 1	-	-	22.0	2,615 fps	-	24.0	2,850 fps	-
75 GR. SPR HP	AR2219	.243"	2.115"	24.5	2,809 fps	45,000 CUP	26.0	2,974 fps	49,500 CUP
	Bench Mark 2	.243"	2.115"	25.5	2,749 fps	38,900 CUP	28.5	3,037 fps	50,100 CUP
	Bench Mark 8208	.243"	2.115"	26.0	2,817 fps	38,400 CUP	28.7	3,089 fps	51,200 CUP
75 GR.	AR2206	-	-	25.5	2,700 fps	-	27.5	3,010 fps	-
75 GR. SPR HP	AR2206H	.243"	2.115"	25.5	2,740 fps	43,500 CUP	27.5	2,981 fps	48,500 CUP
	AR2208	.243"	2.115"	26.0	2,737 fps	40,000 CUP	28.0	2,906 fps	47,000 CUP
80 GR. SPR SP	AR2207	.243"	2.115"	19.0	2,359 fps	37,600 CUP	21.0	2,641 fps	49,500 CUP
	AR2219	.243"	2.115"	23.5	2,658 fps	42,000 CUP	25.5	2,866 fps	47,500 CUP
	Bench Mark 2	.243"	2.115"	25.0	2,674 fps	36,400 CUP	28.0	2,970 fps	50,400 CUP
	Bench Mark 8208	.243"	2.115"	26.0	2,811 fps	39,700 CUP	28.3	3,023 fps	51,400 CUP
	AR2206H	.243"	2.115"	25.0	2,641 fps	40,400 CUP	27.0	2,904 fps	47,500 CUP
	AR2208	.243"	2.115"	26.0	2,689 fps	38,200 CUP	28.0	2,843 fps	44,400 CUP
85 GR. SIE HPBT	AR2219	.243"	2.080"	23.0	2,571 fps	44,000 CUP	25.0	2,794 fps	49,000 CUP
	Bench Mark 2	.243"	2.080"	24.5	2,619 fps	38,300 CUP	27.0	2,860 fps	50,000 CUP
	Bench Mark 8208	.243"	2.080"	25.0	2,719 fps	41,700 CUP	27.5	2,928 fps	52,200 CUP
	AR2206H	.243"	2.080"	24.0	2,540 fps	41,500 CUP	26.0	2,782 fps	48,000 CUP

RIFLE DATA

6mm PPC				Case: Sako (reformed)			Barrel length: 24"		
				Twist: 1:14"			Trim length: 1.510"		
				Primer: Remington 7 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
107 GR. SIE HPBT	AR2208	.243"	2.080"	26.0	2,671 fps	43,400 CUP	28.0	2,848 fps	50,000 CUP
	AR2219	.243"	2.240"	22.0	2,351 fps	42,000 CUP	24.5	2,553 fps	51,100 CUP
	Bench Mark 2	.243"	2.240"	24.0	2,437 fps	43,400 CUP	25.8	2,584 fps	51,200 CUP
	Bench Mark 8208	.243"	2.240"	23.0	2,403 fps	42,400 CUP	25.3	2,584 fps	51,300 CUP
	AR2206H	.243"	2.240"	24.5	2,426 fps	41,500 CUP	26.8C	2,631 fps	49,700 CUP
	AR2208	.243"	2.240"	26.0	2,503 fps	44,900 CUP	27.7C	2,626 fps	50,000 CUP
6mm BR Remington				Case: Remington			Barrel length: 24"		
				Twist: 1:9"			Trim length: 1.510"		
				Primer: Remington 7 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT	AR2207	.243"	2.080"	26.0	3,230 fps	37,600 CUP	28.8	3,542 fps	51,000 CUP
	AR2219	.243"	2.080"	30.0	3,333 fps	38,800 CUP	32.5	3,604 fps	51,100 CUP
	Bench Mark 2	.243"	2.080"	31.0	3,322 fps	41,200 CUP	33.5C	3,557 fps	50,300 CUP
	Bench Mark 8208	.243"	2.080"	30.0	3,204 fps	33,900 CUP	33.5C	3,546 fps	44,800 CUP
	AR2206H	.243"	2.080"	31.0	3,233 fps	37,300 CUP	33.0C	3,449 fps	45,300 CUP
	AR2208	.243"	2.080"	31.0	3,043 fps	31,600 CUP	34.0C	3,347 fps	41,800 CUP
58 GR. HDY V-MAX	AR2207	.243"	2.140"	26.0	3,205 fps	38,000 CUP	28.5	3,454 fps	49,900 CUP
	AR2219	.243"	2.140"	29.5	3,240 fps	40,100 CUP	31.3	3,415 fps	48,400 CUP
	Bench Mark 2	.243"	2.140"	30.0	3,241 fps	42,000 CUP	32.0	3,450 fps	50,600 CUP
	Bench Mark 8208	.243"	2.140"	30.0	3,207 fps	36,800 CUP	33.5C	3,552 fps	50,000 CUP
	AR2206H	.243"	2.140"	31.5	3,250 fps	38,000 CUP	33.5	3,415 fps	45,100 CUP
	AR2208	.243"	2.140"	31.0	3,052 fps	34,300 CUP	34.0C	3,355 fps	46,100 CUP
60 GR. SIE HP	AR2207	.243"	2.080"	25.0	3,137 fps	39,600 CUP	27.5	3,378 fps	50,700 CUP
	AR2219	.243"	2.080"	30.0	3,281 fps	42,000 CUP	32.0	3,481 fps	49,500 CUP
	Bench Mark 2	.243"	2.080"	30.0	3,165 fps	41,400 CUP	32.0	3,373 fps	49,900 CUP
	Bench Mark 8208	.243"	2.080"	29.0	3,121 fps	36,800 CUP	32.7	3,475 fps	48,900 CUP
60 GR.	AR2206	-	-	30.5	3,175 fps	-	32.5	3,380 fps	-
60 GR. SIE HP	AR2206H	.243"	2.080"	31.0	3,177 fps	42,000 CUP	33.0C	3,384 fps	47,000 CUP
	AR2208	.243"	2.080"	31.0	3,161 fps	36,000 CUP	34.0C	3,442 fps	48,500 CUP
62 GR. BAR VG FB	AR2207	.243"	2.140"	24.4	3,028 fps	41,800 CUP	26.0	3,145 fps	47,700 CUP
	AR2219	.243"	2.140"	27.8	3,070 fps	42,000 CUP	29.6	3,190 fps	47,600 CUP
	Bench Mark 2	.243"	2.140"	29.1	3,060 fps	40,300 CUP	31.0C	3,265 fps	48,300 CUP
	Bench Mark 8208	.243"	2.140"	29.6	3,146 fps	41,600 CUP	31.5C	3,307 fps	47,900 CUP
	AR2206H	.243"	2.140"	29.6	3,166 fps	41,500 CUP	31.5C	3,349 fps	49,300 CUP
	AR2208	.243"	2.140"	28.7	3,102 fps	45,200 CUP	31.5C	3,258 fps	49,200 CUP
65 GR. HDY V-MAX	AR2207	.243"	2.140"	25.0	3,071 fps	42,200 CUP	27.0	3,242 fps	49,100 CUP
	AR2219	.243"	2.140"	27.0	2,978 fps	36,800 CUP	30.5	3,303 fps	49,600 CUP
	Bench Mark 2	.243"	2.140"	27.0	2,997 fps	36,000 CUP	30.5	3,205 fps	46,400 CUP
	Bench Mark 8208	.243"	2.140"	29.0	3,084 fps	36,300 CUP	32.3	3,397 fps	48,700 CUP
	AR2206H	.243"	2.140"	30.0	3,064 fps	37,700 CUP	33.0	3,366 fps	49,300 CUP
	AR2208	.243"	2.140"	31.0	3,021 fps	42,200 CUP	33.0	3,268 fps	49,900 CUP
70 GR. NOS BT	AR2219	.243"	2.100"	28.0	2,976 fps	38,700 CUP	30.0	3,200 fps	47,000 CUP
	Bench Mark 2	.243"	2.100"	29.7	3,019 fps	39,900 CUP	31.6	3,227 fps	49,000 CUP
	Bench Mark 8208	.243"	2.100"	29.5	3,045 fps	37,100 CUP	32.7	3,361 fps	51,600 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

6mm BR Remington				Case: Remington Twist: 1:9" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.510"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
70 GR.	AR2206	-	-	29.0	2,995 fps	-	31.0	3,200 fps	-
70 GR. NOS BT	AR2206H	.243"	2.100"	29.0	2,895 fps	38,200 CUP	31.0	3,188 fps	47,000 CUP
	AR2208	.243"	2.100"	31.0	3,101 fps	38,900 CUP	34.0C	3,342 fps	49,400 CUP
75 GR. SPR HP	AR2219	.243"	2.115"	26.0	2,756 fps	37,100 CUP	28.0	3,096 fps	47,000 CUP
	Bench Mark 2	.243"	2.115"	29.0	2,959 fps	41,700 CUP	31.0	3,127 fps	49,600 CUP
	Bench Mark 8208	.243"	2.115"	28.0	2,926 fps	38,900 CUP	30.8	3,167 fps	48,800 CUP
75 GR.	AR2206	-	-	28.5	2,915 fps	-	30.5	3,120 fps	-
75 GR. SPR HP	AR2206H	.243"	2.115"	28.5	2,980 fps	40,000 CUP	30.5	3,129 fps	47,000 CUP
	AR2208	.243"	2.115"	30.5	3,057 fps	42,200 CUP	32.5	3,239 fps	50,000 CUP
80 GR. SPR SP	AR2219	.243"	2.115"	26.0	2,787 fps	39,300 CUP	28.0	3,005 fps	47,000 CUP
	Bench Mark 2	.243"	2.115"	28.5	2,872 fps	40,900 CUP	30.5	3,048 fps	49,400 CUP
	Bench Mark 8208	.243"	2.115"	27.0	2,823 fps	39,800 CUP	30.4	3,107 fps	49,500 CUP
	AR2206H	.243"	2.115"	28.0	2,945 fps	40,400 CUP	30.0	3,100 fps	47,000 CUP
	AR2208	.243"	2.115"	30.5	2,999 fps	43,100 CUP	32.5	3,159 fps	50,700 CUP
85 GR. SPR SP	AR2219	.243"	2.115"	22.0	2,472 fps	40,400 CUP	24.0	2,632 fps	47,000 CUP
	Bench Mark 2	.243"	2.115"	27.7	2,792 fps	42,100 CUP	29.7	2,960 fps	49,800 CUP
	Bench Mark 8208	.243"	2.115"	27.0	2,782 fps	41,400 CUP	29.8	3,016 fps	49,900 CUP
	AR2206H	.243"	2.115"	24.5	2,590 fps	38,100 CUP	26.5	2,770 fps	49,500 CUP
	AR2208	.243"	2.115"	29.0	2,840 fps	43,100 CUP	31.0	3,007 fps	50,800 CUP
90 GR. SPR SP	AR2219	.243"	2.115"	22.0	2,423 fps	40,600 CUP	24.0	2,607 fps	48,000 CUP
	Bench Mark 2	.243"	2.115"	27.0	2,703 fps	43,200 CUP	29.0	2,868 fps	49,300 CUP
	Bench Mark 8208	.243"	2.115"	25.0	2,599 fps	41,500 CUP	28.0	2,813 fps	50,000 CUP
	AR2206H	.243"	2.115"	24.5	2,560 fps	40,400 CUP	27.0	2,743 fps	48,000 CUP
	AR2208	.243"	2.115"	27.5	2,674 fps	39,500 CUP	30.2	2,886 fps	47,500 CUP
100 GR. HDY SP	AR2219	.243"	2.150"	22.0	2,275 fps	42,000 CUP	23.5	2,519 fps	50,000 CUP
	Bench Mark 2	.243"	2.150"	26.0	2,485 fps	43,100 CUP	28.0	2,670 fps	49,500 CUP
	Bench Mark 8208	.243"	2.150"	24.0	2,388 fps	40,500 CUP	27.0	2,630 fps	49,800 CUP
	AR2206H	.243"	2.150"	24.5	2,423 fps	42,500 CUP	27.0	2,603 fps	49,000 CUP
	AR2208	.243"	2.150"	26.0	2,491 fps	43,000 CUP	28.0	2,649 fps	48,900 CUP
107 GR. SIE HPBT	AR2219	.243"	2.250"	23.0	2,325 fps	40,800 CUP	25.5	2,525 fps	49,200 CUP
	Bench Mark 2	.243"	2.250"	26.0	2,466 fps	42,000 CUP	28.0	2,613 fps	49,800 CUP
	Bench Mark 8208	.243"	2.250"	24.0	2,380 fps	42,700 CUP	26.7	2,555 fps	50,400 CUP
	AR2206H	.243"	2.250"	24.5	2,329 fps	37,900 CUP	27.5	2,605 fps	49,800 CUP
	AR2208	.243"	2.250"	26.0	2,367 fps	39,800 CUP	29.0C	2,620 fps	50,100 CUP

RIFLE DATA

6mm-250 (6mm International)				Case: Winchester (reformed)			Barrel length: 24"		
				Twist: 1:8"			Trim length: 1.902"		
				Primer: Federal 210					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT	Bench Mark 2	.243"	2.500"	34.0	3,452 fps	43,700 CUP	37.0	3,684 fps	52,000 CUP
	AR2206H	.243"	2.500"	37.0	3,544 fps	41,100 CUP	39.7C	3,766 fps	51,000 CUP
	AR2208	.243"	2.500"	38.0	3,515 fps	43,900 CUP	40.5C	3,720 fps	50,900 CUP
60 GR. SIE HP	Bench Mark 2	.243"	2.400"	33.0	3,337 fps	44,500 CUP	35.5	3,525 fps	51,000 CUP
	AR2206H	.243"	2.400"	36.0	3,417 fps	40,500 CUP	38.5	3,674 fps	51,400 CUP
	AR2208	.243"	2.400"	37.0	3,398 fps	44,300 CUP	39.3	3,601 fps	51,400 CUP
70 GR. SIE HPBT	Bench Mark 2	.243"	2.400"	31.0	3,149 fps	47,000 CUP	34.3	3,311 fps	49,000 CUP
	AR2206H	.243"	2.400"	34.0	3,228 fps	40,900 CUP	37.0	3,436 fps	51,300 CUP
	AR2208	.243"	2.400"	35.0	3,166 fps	40,200 CUP	37.5	3,383 fps	50,900 CUP
80 GR. SIE BTSP	AR2206H	.243"	2.400"	34.0	3,185 fps	45,800 CUP	36.0	3,304 fps	51,000 CUP
	AR2208	.243"	2.400"	34.0	3,104 fps	44,800 CUP	36.7	3,274 fps	51,400 CUP
	AR2209	.243"	2.400"	39.0	3,082 fps	40,400 CUP	41.0C	3,211 fps	45,000 CUP
85 GR. SPR SPBT	AR2206H	.243"	2.450"	32.7	3,070 fps	45,300 CUP	34.8	3,191 fps	50,700 CUP
	AR2208	.243"	2.450"	33.0	3,011 fps	44,100 CUP	35.4	3,171 fps	51,700 CUP
	AR2209	.243"	2.450"	38.5	3,059 fps	42,800 CUP	41.0C	3,223 fps	48,900 CUP
90 GR. SPR SP	AR2206H	.243"	2.400"	32.4	2,939 fps	46,000 CUP	34.5	3,060 fps	51,400 CUP
	AR2208	.243"	2.400"	33.3	2,923 fps	44,900 CUP	35.5	3,053 fps	51,300 CUP
	AR2209	.243"	2.400"	38.5	2,985 fps	44,900 CUP	41.0C	3,126 fps	49,900 CUP
95 GR. NOS PART	AR2206H	.243"	2.500"	31.0	2,830 fps	45,900 CUP	33.0	2,935 fps	50,600 CUP
	AR2208	.243"	2.500"	31.7	2,819 fps	43,900 CUP	33.8	2,962 fps	50,800 CUP
	AR2209	.243"	2.500"	36.5	2,887 fps	44,800 CUP	39.0C	3,045 fps	50,700 CUP
100 GR. HDY SP	AR2206H	.243"	2.500"	29.8	2,710 fps	46,500 CUP	31.8	2,835 fps	50,200 CUP
	AR2208	.243"	2.500"	31.5	2,741 fps	46,000 CUP	33.5	2,851 fps	50,800 CUP
	AR2209	.243"	2.500"	35.5	2,769 fps	45,300 CUP	37.9C	2,890 fps	50,900 CUP
105 GR. HDY A-MAX	AR2206H	.243"	2.600"	28.9	2,646 fps	46,000 CUP	30.8	2,731 fps	51,700 CUP
	AR2208	.243"	2.600"	30.8	2,726 fps	48,600 CUP	32.8	2,822 fps	51,400 CUP
	AR2209	.243"	2.600"	34.7	2,724 fps	45,700 CUP	37.0C	2,883 fps	52,200 CUP
	AR2213SC	.243"	2.600"	37.6	2,692 fps	45,400 CUP	40.0C	2,800 fps	48,700 CUP
107 GR. SIE HPBT	AR2206H	.243"	2.600"	29.7	2,659 fps	45,900 CUP	31.6	2,783 fps	51,700 CUP
	AR2208	.243"	2.600"	31.2	2,716 fps	47,400 CUP	33.2	2,817 fps	51,800 CUP
	AR2209	.243"	2.600"	35.2	2,720 fps	45,000 CUP	37.5	2,844 fps	50,300 CUP
	AR2213SC	.243"	2.600"	37.6	2,606 fps	40,600 CUP	40.0C	2,738 fps	45,500 CUP

243 Winchester				Case: Winchester			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.035"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT LF	AR2206H	.243"	2.710"	35.7	3,621 fps	50,700 PSI	38.0	3,777 fps	57,100 PSI
	AR2208	.243"	2.710"	37.1	3,646 fps	53,000 PSI	39.5	3,782 fps	57,700 PSI
55 GR. NOS BT	Bench Mark 2	.243"	2.650"	39.0	3,575 fps	42,600 CUP	41.5	3,815 fps	50,100 CUP
	Bench Mark 8208	.243"	2.650"	40.0	3,687 fps	47,700 PSI	43.0	3,931 fps	58,600 PSI
55 GR.	AR2206	-	-	39.0	3,695 fps	-	42.0	3,890 fps	-
55 GR. NOS BT	AR2206H	.243"	2.650"	40.0	3,638 fps	35,100 CUP	44.5	4,058 fps	49,300 CUP
	AR2208	.243"	2.650"	41.0	3,776 fps	42,000 CUP	45.0	4,000 fps	50,000 CUP
58 GR. HDY V-MAX	Bench Mark 2	.243"	2.600"	35.0	3,417 fps	41,800 CUP	37.5	3,607 fps	50,000 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

243 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.035"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	Bench Mark 8208	.243"	2.600"	39.0	3,581 fps	47,300 PSI	42.3	3,825 fps	58,300 PSI
	AR2206H	.243"	2.600"	40.0	3,643 fps	43,300 CUP	43.0	3,851 fps	49,900 CUP
	AR2208	.243"	2.600"	41.0	3,617 fps	44,800 CUP	44.0	3,790 fps	49,800 CUP
60 GR. SIE HP	Bench Mark 2	.243"	2.600"	38.5	3,587 fps	47,000 CUP	41.2	3,713 fps	50,700 CUP
	Bench Mark 8208	.243"	2.600"	37.0	3,505 fps	50,000 PSI	40.2	3,702 fps	58,500 PSI
60 GR.	AR2206	-	-	38.0	3,550 fps	-	41.5	3,715 fps	-
60 GR. SIE HP	AR2206H	.243"	2.600"	38.0	3,521 fps	40,500 CUP	42.0	3,812 fps	50,600 CUP
	AR2208	.243"	2.600"	40.0	3,671 fps	45,400 CUP	42.7	3,816 fps	50,400 CUP
62 GR. BAR VG FB	Bench Mark 2	.243"	2.620"	36.1	3,442 fps	52,000 PSI	38.0	3,586 fps	58,600 PSI
	Bench Mark 8208	.243"	2.620"	35.0	3,321 fps	46,500 PSI	39.0	3,598 fps	58,800 PSI
	AR2206H	.243"	2.620"	36.7	3,478 fps	51,200 PSI	39.0	3,622 fps	57,400 PSI
	AR2208	.243"	2.620"	39.3	3,476 fps	50,900 PSI	41.4	3,620 fps	57,100 PSI
65 GR. HDY V-MAX	Bench Mark 2	.243"	2.600"	37.0	3,417 fps	44,300 CUP	40.0	3,598 fps	50,600 CUP
	Bench Mark 8208	.243"	2.600"	37.0	3,363 fps	45,800 PSI	41.0	3,666 fps	58,500 PSI
	AR2206H	.243"	2.600"	38.0	3,522 fps	44,500 CUP	41.0	3,677 fps	49,200 CUP
	AR2208	.243"	2.600"	38.0	3,494 fps	43,100 CUP	41.0	3,682 fps	49,600 CUP
70 GR. SPR HP	Bench Mark 2	.243"	2.625"	36.5	3,128 fps	45,100 CUP	39.3	3,491 fps	50,300 CUP
	Bench Mark 8208	.243"	2.625"	35.0	3,232 fps	47,600 PSI	38.6	3,461 fps	58,100 PSI
70 GR.	AR2206	-	-	36.0	3,295 fps	-	38.0	3,495 fps	-
70 GR. SPR HP	AR2206H	.243"	2.625"	36.0	3,286 fps	42,700 CUP	39.5	3,477 fps	49,200 CUP
	AR2208	.243"	2.625"	38.0	3,433 fps	45,500 CUP	40.5	3,574 fps	50,100 CUP
75 GR. HDY HP	Bench Mark 8208	.243"	2.640"	34.5	3,114 fps	48,200 PSI	37.8	3,316 fps	57,900 PSI
75 GR.	AR2206	-	-	34.0	3,125 fps	-	36.5	3,330 fps	-
75 GR. HDY HP	AR2206H	.243"	2.640"	34.0	3,101 fps	40,900 CUP	38.0	3,354 fps	49,400 CUP
	AR2208	.243"	2.640"	36.0	3,246 fps	45,000 CUP	38.5	3,408 fps	50,500 CUP
80 GR. HDY GMX	Bench Mark 8208	.243"	2.610"	33.0	2,961 fps	51,400 PSI	35.1	3,109 fps	58,800 PSI
	AR2206H	.243"	2.610"	32.7	2,982 fps	51,900 PSI	34.8	3,123 fps	58,100 PSI
	AR2208	.243"	2.610"	34.1	2,986 fps	51,200 PSI	36.3	3,137 fps	58,700 PSI
	AR2209	.243"	2.610"	38.3	3,045 fps	52,600 PSI	40.7	3,183 fps	58,500 PSI
80 GR. SIE BTSP	Bench Mark 8208	.243"	2.600"	34.0	3,013 fps	45,400 PSI	38.0	3,269 fps	57,500 PSI
80 GR.	AR2206	-	-	34.0	3,055 fps	-	36.0	3,225 fps	-
80 GR. SIE BTSP	AR2206H	.243"	2.635"	35.0	3,123 fps	45,800 CUP	38.0	3,307 fps	50,100 CUP
	AR2208	.243"	2.635"	36.0	3,193 fps	45,400 CUP	38.5	3,355 fps	50,300 CUP
85 GR.	AR2206	-	-	32.0	2,950 fps	-	35.5	3,125 fps	-
85 GR. BAR TSX	AR2206H	.243"	2.620"	32.6	2,955 fps	51,800 PSI	34.7	3,089 fps	57,500 PSI
	AR2208	.243"	2.620"	34.3	2,997 fps	52,200 PSI	36.5	3,121 fps	58,000 PSI
	AR2209	.243"	2.620"	37.3	2,972 fps	49,600 PSI	40.5	3,141 fps	57,300 PSI
90 GR. SPR SP	AR2206H	.243"	2.625"	34.0	2,967 fps	44,900 CUP	36.5	3,114 fps	50,800 CUP
	AR2208	.243"	2.625"	34.0	2,964 fps	44,800 CUP	36.5	3,106 fps	50,400 CUP
	AR2209	.243"	2.625"	42.0	3,039 fps	44,400 CUP	44.5	3,185 fps	50,600 CUP
	AR2213SC	.243"	2.625"	45.0	3,010 fps	43,700 CUP	48.0C	3,203 fps	50,800 CUP
95 GR. NOS PART	AR2206H	.243"	2.650"	33.0	2,865 fps	45,000 CUP	35.0	2,990 fps	50,700 CUP
	AR2208	.243"	2.650"	33.0	2,870 fps	45,000 CUP	35.0	2,996 fps	50,200 CUP
	AR2209	.243"	2.650"	39.0	2,917 fps	45,800 CUP	42.0	3,087 fps	50,500 CUP
	AR2213SC	.243"	2.650"	42.0	2,930 fps	47,000 CUP	44.5C	3,052 fps	50,700 CUP

RIFLE DATA

243 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.035"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SPR BTSP	AR2217	.243"	2.650"	45.0	2,946 fps	44,900 CUP	48.0C	3,077 fps	50,000 CUP
	Trail Boss	.243"	2.650"	8.0	1,045 fps	27,300 CUP	15.3	1,603 fps	39,100 CUP
	AR2206H	.243"	2.650"	31.0	2,683 fps	44,900 CUP	33.0	2,818 fps	50,100 CUP
	AR2208	.243"	2.650"	31.0	2,674 fps	42,700 CUP	33.7	2,838 fps	50,400 CUP
	AR2209	.243"	2.650"	37.0	2,806 fps	45,100 CUP	40.0	2,973 fps	51,000 CUP
	AR2213SC	.243"	2.650"	39.0	2,761 fps	44,400 CUP	42.0	2,924 fps	50,100 CUP
105 GR. HDY A-MAX	AR2217	.243"	2.650"	44.0	2,876 fps	45,700 CUP	47.0C	3,000 fps	49,800 CUP
	AR2206H	.243"	2.760"	30.5	2,619 fps	44,900 CUP	32.5	2,724 fps	50,100 CUP
	AR2208	.243"	2.760"	31.0	2,631 fps	45,600 CUP	33.0	2,769 fps	50,800 CUP
	AR2209	.243"	2.760"	35.0	2,663 fps	44,300 CUP	37.5	2,799 fps	49,500 CUP
	AR2213SC	.243"	2.760"	38.0	2,687 fps	43,900 CUP	41.0	2,846 fps	50,200 CUP
	AR2217	.243"	2.760"	43.0	2,798 fps	45,400 CUP	46.0C	2,930 fps	50,200 CUP
107 GR. SIE BTHP	AR2225	.243"	2.760"	46.0	2,772 fps	44,200 CUP	49.0C	2,986 fps	49,700 CUP
	AR2206H	.243"	2.850"	30.5	2,613 fps	45,900 CUP	32.5	2,719 fps	49,900 CUP
	AR2208	.243"	2.850"	31.0	2,630 fps	45,300 CUP	33.0	2,749 fps	50,400 CUP
	AR2209	.243"	2.850"	35.0	2,671 fps	43,100 CUP	37.5	2,800 fps	50,200 CUP
	AR2213SC	.243"	2.850"	38.0	2,678 fps	43,700 CUP	41.0	2,835 fps	50,100 CUP
	AR2217	.243"	2.850"	43.0	2,787 fps	44,700 CUP	46.0C	2,918 fps	50,100 CUP
6mm Remington (244 Remington)				Case: Winchester Twist: 1:9" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.223"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT LF	Bench Mark 2	.243"	2.825"	40.0	3,584 fps	44,900 PSI	44.0	4,005 fps	61,700 PSI
	Bench Mark 8208	.243"	2.825"	40.0	3,540 fps	42,200 PSI	44.6	4,013 fps	60,800 PSI
	AR2206H	.243"	2.825"	41.0	3,598 fps	43,200 PSI	46.0	4,071 fps	61,800 PSI
	AR2208	.243"	2.825"	43.0	3,679 fps	46,900 PSI	47.0	4,027 fps	60,700 PSI
55 GR. NOS BT	Bench Mark 2	.243"	2.800"	40.0	3,656 fps	44,800 PSI	44.5	4,028 fps	59,600 PSI
	Bench Mark 8208	.243"	2.800"	40.0	3,533 fps	39,700 PSI	45.0	4,044 fps	59,300 PSI
	AR2206H	.243"	2.800"	42.0	3,656 fps	43,700 PSI	46.5	4,066 fps	59,300 PSI
	AR2208	.243"	2.800"	43.0	3,678 fps	45,700 PSI	47.5	4,023 fps	58,800 PSI
58 GR. HDY V-MAX	Bench Mark 2	.243"	2.775"	39.0	3,500 fps	42,200 PSI	43.0	3,896 fps	59,000 PSI
	Bench Mark 8208	.243"	2.775"	40.0	3,537 fps	42,700 PSI	44.5	3,939 fps	58,600 PSI
	AR2206H	.243"	2.775"	41.0	3,590 fps	44,500 PSI	46.0	3,972 fps	58,900 PSI
	AR2208	.243"	2.775"	42.0	3,571 fps	44,600 PSI	46.7	3,953 fps	59,600 PSI
60 GR. SIE HP	Bench Mark 2	.243"	2.700"	39.0	3,478 fps	44,400 PSI	43.0	3,826 fps	59,000 PSI
	Bench Mark 8208	.243"	2.700"	40.0	3,488 fps	43,000 PSI	44.5	3,907 fps	60,500 PSI
	AR2206H	.243"	2.700"	41.0	3,544 fps	45,300 PSI	46.0	3,934 fps	61,400 PSI
	AR2208	.243"	2.700"	42.0	3,565 fps	47,200 PSI	46.5	3,900 fps	60,200 PSI
65 GR. HDY V-MAX	Bench Mark 2	.243"	2.825"	39.0	3,472 fps	49,000 PSI	41.3	3,694 fps	60,200 PSI
	Bench Mark 8208	.243"	2.825"	39.0	3,412 fps	45,000 PSI	43.5	3,777 fps	60,900 PSI
	AR2206H	.243"	2.825"	39.0	3,460 fps	47,100 PSI	44.0	3,797 fps	60,600 PSI
	AR2208	.243"	2.825"	41.0	3,468 fps	47,600 PSI	45.5	3,775 fps	60,200 PSI
	AR2209	.243"	2.825"	48.0	3,564 fps	50,900 PSI	51.5C	3,763 fps	58,900 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

6mm Remington (244 Remington)				Case: Winchester			Barrel length: 24"		
				Twist: 1:9"			Trim length: 2.223"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
70 GR. SIE HPBT	Bench Mark 2	.243"	2.810"	38.0	3,315 fps	46,800 PSI	41.0	3,579 fps	59,300 PSI
	Bench Mark 8208	.243"	2.810"	38.0	3,236 fps	43,000 PSI	42.7	3,616 fps	59,500 PSI
	AR2206H	.243"	2.810"	39.0	3,435 fps	51,200 PSI	43.0	3,653 fps	60,100 PSI
	AR2208	.243"	2.810"	40.0	3,355 fps	47,800 PSI	44.5	3,639 fps	59,500 PSI
	AR2209	.243"	2.810"	46.0	3,360 fps	46,700 PSI	50.8C	3,671 fps	59,800 PSI
75 GR. HDY HP	Bench Mark 8208	.243"	2.825"	37.0	3,184 fps	48,100 PSI	41.5	3,470 fps	59,700 PSI
	AR2206H	.243"	2.825"	37.0	3,230 fps	49,900 PSI	41.5	3,482 fps	60,500 PSI
	AR2208	.243"	2.825"	38.0	3,207 fps	48,500 PSI	42.6	3,480 fps	59,500 PSI
	AR2209	.243"	2.825"	44.0	3,262 fps	48,600 PSI	49.0	3,563 fps	61,200 PSI
80 GR. BAR TTSX BT	Bench Mark 8208	.243"	2.810"	36.0	3,068 fps	46,400 PSI	40.3	3,363 fps	60,100 PSI
	AR2206H	.243"	2.810"	37.0	3,169 fps	49,500 PSI	41.3	3,419 fps	60,500 PSI
	AR2208	.243"	2.810"	38.0	3,140 fps	47,900 PSI	42.5	3,416 fps	59,800 PSI
	AR2209	.243"	2.810"	42.0	3,065 fps	43,900 PSI	47.5	3,427 fps	58,800 PSI
80 GR. SPR SP	Bench Mark 8208	.243"	2.775"	37.0	3,156 fps	51,600 PSI	40.7	3,353 fps	59,800 PSI
	AR2206H	.243"	2.775"	37.0	3,167 fps	50,900 PSI	40.5	3,377 fps	59,900 PSI
	AR2208	.243"	2.775"	38.0	3,148 fps	49,400 PSI	41.8	3,376 fps	59,400 PSI
	AR2209	.243"	2.775"	42.0	3,123 fps	46,700 PSI	47.0	3,430 fps	59,400 PSI
85 GR. NOS PART	AR2206H	.243"	2.825"	35.5	3,003 fps	48,400 PSI	39.5	3,253 fps	59,200 PSI
	AR2208	.243"	2.825"	37.0	3,020 fps	49,200 PSI	41.0	3,270 fps	59,100 PSI
	AR2209	.243"	2.825"	42.0	3,075 fps	48,200 PSI	46.5	3,350 fps	59,300 PSI
87 GR. HDY HPBT	AR2206H	.243"	2.825"	35.5	2,986 fps	49,100 PSI	39.5	3,214 fps	60,300 PSI
	AR2208	.243"	2.825"	37.0	3,011 fps	49,100 PSI	41.0	3,243 fps	59,300 PSI
	AR2209	.243"	2.825"	42.0	3,051 fps	48,100 PSI	46.7	3,317 fps	59,500 PSI
	AR2213SC	.243"	2.825"	44.0	2,871 fps	41,900 PSI	49.5C	3,164 fps	53,200 PSI
95 GR. NOS BT	AR2206H	.243"	2.825"	35.0	2,855 fps	50,100 PSI	38.7	3,076 fps	60,100 PSI
	AR2208	.243"	2.825"	36.0	2,843 fps	47,800 PSI	40.0	3,091 fps	58,900 PSI
	AR2209	.243"	2.825"	41.0	2,909 fps	48,100 PSI	45.5	3,167 fps	59,200 PSI
	AR2213SC	.243"	2.825"	44.0	2,798 fps	43,700 PSI	49.5C	3,125 fps	57,600 PSI
	AR2217	.243"	2.825"	47.0	2,835 fps	43,000 PSI	50.5C	3,056 fps	52,900 PSI
100 GR. SPR BT	AR2206H	.243"	2.775"	34.0	2,749 fps	45,900 PSI	38.5	3,035 fps	59,900 PSI
	AR2208	.243"	2.775"	36.0	2,843 fps	49,800 PSI	40.2	3,055 fps	59,200 PSI
	AR2209	.243"	2.775"	41.0	2,879 fps	47,900 PSI	45.5	3,137 fps	59,800 PSI
	AR2213SC	.243"	2.775"	45.0	2,794 fps	43,900 PSI	49.0C	3,064 fps	56,100 PSI
	AR2217	.243"	2.775"	47.0	2,779 fps	41,500 PSI	50.0C	2,955 fps	48,900 PSI
105 GR. HDY A-MAX	AR2208	.243"	2.825"	34.0	2,711 fps	47,400 PSI	38.0	2,946 fps	58,800 PSI
	AR2209	.243"	2.825"	40.0	2,838 fps	49,700 PSI	43.5	3,029 fps	58,800 PSI
	AR2213SC	.243"	2.825"	44.0	2,839 fps	49,400 PSI	47.5C	3,028 fps	57,900 PSI
	AR2217	.243"	2.825"	47.0	2,817 fps	45,800 PSI	50.0C	2,980 fps	53,300 PSI
107 GR. SIE HPBT	AR2208	.243"	2.950"	34.0	2,652 fps	46,300 PSI	38.5	2,930 fps	60,200 PSI
	AR2209	.243"	2.950"	39.0	2,779 fps	48,800 PSI	43.5	3,016 fps	59,600 PSI
	AR2213SC	.243"	2.950"	43.0	2,779 fps	48,300 PSI	48.0C	3,042 fps	59,600 PSI
	AR2217	.243"	2.950"	47.0	2,818 fps	47,400 PSI	50.0C	2,980 fps	55,100 PSI
	AR2225	.243"	2.950"	47.0	2,836 fps	44,900 PSI	50.0C	3,033 fps	55,200 PSI
115 GR. BAR RN	AR2209	.243"	2.825"	36.0	2,537 fps	43,200 CUP	39.0	2,696 fps	49,700 CUP
	AR2213SC	.243"	2.825"	39.0	2,598 fps	43,800 CUP	42.0	2,761 fps	49,800 CUP

RIFLE DATA

6mm Remington (244 Remington)				Case: Winchester Twist: 1:9" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.223"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2217	.243"	2.825"	43.0	2,665 fps	43,800 CUP	45.5	2,793 fps	49,600 CUP
	AR2225	.243"	2.825"	47.0	2,711 fps	43,200 CUP	50.0C	2,878 fps	49,000 CUP
243 Winchester Super Short Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 1.660"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
58 GR. HDY V-MAX	Bench Mark 8208	.243"	2.200"	40.0	3,677 fps	50,200 PSI	44.3	3,985 fps	63,200 PSI
	AR2206H	.243"	2.220"	42.0	3,756 fps	51,700 PSI	45.3	4,021 fps	63,100 PSI
	AR2208	.243"	2.220"	44.0	3,739 fps	52,000 PSI	47.0	3,975 fps	62,800 PSI
62 GR. BAR VG FB	Bench Mark 8208	.243"	2.240"	38.5	3,562 fps	54,800 PSI	40.9	3,726 fps	62,300 PSI
	AR2206H	.243"	2.240"	38.0	3,497 fps	55,700 PSI	40.0	3,641 fps	62,800 PSI
	AR2208	.243"	2.240"	39.9	3,441 fps	54,900 PSI	42.4	3,637 fps	61,900 PSI
70 GR. NOS BT	Bench Mark 8208	.243"	2.200"	38.0	3,445 fps	54,000 PSI	41.5	3,646 fps	62,900 PSI
	AR2206H	.243"	2.280"	39.0	3,434 fps	52,500 PSI	42.0	3,618 fps	62,500 PSI
	AR2208	.243"	2.280"	41.0	3,474 fps	54,500 PSI	43.7	3,655 fps	63,400 PSI
	AR2209	.243"	2.280"	45.0	3,385 fps	48,000 PSI	48.7C	3,614 fps	58,400 PSI
80 GR. SIE BTSP	Bench Mark 8208	.243"	2.200"	35.0	3,137 fps	50,500 PSI	39.0	3,394 fps	62,400 PSI
	AR2206H	.243"	2.220"	38.5	3,255 fps	53,300 PSI	41.0	3,409 fps	62,500 PSI
	AR2208	.243"	2.220"	39.0	3,288 fps	54,400 PSI	42.0	3,462 fps	63,300 PSI
	AR2209	.243"	2.220"	45.0	3,323 fps	52,600 PSI	48.7C	3,545 fps	63,000 PSI
90 GR. SFT SCIR	Bench Mark 8208	.243"	2.300"	32.0	2,866 fps	52,200 PSI	35.8	3,098 fps	63,600 PSI
	AR2206H	.243"	2.300"	35.0	2,954 fps	52,000 PSI	37.7	3,124 fps	61,900 PSI
	AR2208	.243"	2.300"	36.0	2,979 fps	53,200 PSI	39.2	3,175 fps	63,200 PSI
	AR2209	.243"	2.300"	41.0	3,087 fps	56,200 PSI	44.0C	3,245 fps	62,900 PSI
	AR2213SC	.243"	2.300"	44.0	3,045 fps	55,800 PSI	47.0C	3,200 fps	63,200 PSI
100 GR. SPR BTSP	Bench Mark 8208	.243"	2.300"	31.5	2,764 fps	52,500 PSI	35.0	2,982 fps	63,100 PSI
	AR2206H	.243"	2.300"	33.0	2,809 fps	55,100 PSI	35.5	2,946 fps	63,600 PSI
	AR2208	.243"	2.300"	34.0	2,829 fps	53,600 PSI	36.6	2,981 fps	62,100 PSI
	AR2209	.243"	2.300"	39.0	2,938 fps	55,400 PSI	41.7	3,074 fps	62,300 PSI
	AR2213SC	.243"	2.300"	41.5	2,878 fps	54,000 PSI	45.0	3,058 fps	63,000 PSI
6mm - 284				Case: Winchester (reformed) Twist: 1:10" Primer: Winchester LR			Barrel length: 26" Trim length: 2.160"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
55 GR. NOS BT	AR2206H	.243"	2.780"	47.0	3,837 fps	47,100 CUP	50.0	4,050 fps	51,700 CUP
	AR2208	.243"	2.780"	47.0	3,779 fps	47,500 CUP	50.5	3,921 fps	51,600 CUP
	AR2209	.243"	2.780"	55.0	3,738 fps	42,300 CUP	59.0C	4,039 fps	51,600 CUP
60 GR. SIE HP	AR2206H	.243"	2.680"	45.0	3,740 fps	47,200 CUP	48.5	3,910 fps	52,100 CUP
	AR2208	.243"	2.680"	45.0	3,672 fps	47,700 CUP	49.0	3,855 fps	52,400 CUP
	AR2209	.243"	2.680"	54.0	3,719 fps	44,800 CUP	58.0	3,976 fps	52,300 CUP
	AR2213SC	.243"	2.680"	56.0	3,584 fps	46,400 CUP	60.0C	3,756 fps	51,400 CUP
62 GR. BAR VG FB	AR2206H	.243"	2.775"	40.0	3,408 fps	40,600 CUP	44.5	3,707 fps	50,800 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

6mm - 284				Case: Winchester (reformed)			Barrel length: 26"		
				Twist: 1:10"			Trim length: 2.160"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2208	.243"	2.775"	44.0	3,583 fps	44,500 CUP	48.5	3,851 fps	51,800 CUP
	AR2209	.243"	2.775"	48.0	3,489 fps	41,600 CUP	54.3C	3,863 fps	52,500 CUP
	AR2213SC	.243"	2.775"	55.0	3,607 fps	46,400 CUP	59.0C	3,777 fps	50,300 CUP
65 GR. HDY V-MAX	AR2206H	.243"	2.735"	43.0	3,528 fps	42,800 CUP	46.0	3,724 fps	50,400 CUP
	AR2208	.243"	2.735"	44.0	3,532 fps	45,200 CUP	47.0	3,688 fps	49,800 CUP
	AR2209	.243"	2.735"	51.7	3,584 fps	44,500 CUP	55.0	3,767 fps	49,800 CUP
	AR2213SC	.243"	2.735"	54.0	3,481 fps	43,800 CUP	57.5	3,678 fps	51,300 CUP
70 GR. HDY SP	AR2209	.243"	2.730"	52.0	3,550 fps	46,300 CUP	55.0	3,731 fps	52,200 CUP
	AR2213SC	.243"	2.730"	55.0	3,442 fps	45,900 CUP	58.5C	3,632 fps	51,900 CUP
75 GR. HDY V-MAX	AR2209	.243"	2.750"	49.0	3,466 fps	46,800 CUP	53.0	3,644 fps	52,300 CUP
	AR2213SC	.243"	2.750"	53.0	3,331 fps	45,200 CUP	56.5	3,566 fps	52,200 CUP
80 GR. SPR SP	AR2209	.243"	2.730"	47.5	3,259 fps	45,600 CUP	50.5	3,447 fps	51,800 CUP
	AR2213SC	.243"	2.730"	52.0	3,306 fps	47,100 CUP	55.0	3,440 fps	52,000 CUP
	AR2217	.243"	2.730"	55.0	3,296 fps	46,700 CUP	59.0C	3,467 fps	52,000 CUP
85 GR. BAR TSX	AR2209	.243"	2.750"	43.0	3,116 fps	43,100 CUP	47.5	3,343 fps	51,800 CUP
	AR2213SC	.243"	2.750"	46.0	3,137 fps	46,200 CUP	50.0	3,332 fps	51,700 CUP
	AR2217	.243"	2.750"	51.0	3,234 fps	48,200 CUP	55.5C	3,374 fps	51,700 CUP
	AR2225	.243"	2.750"	55.0	3,272 fps	44,300 CUP	57.0C	3,398 fps	49,000 CUP
90 GR. NOS E-TIP	AR2209	.243"	2.800"	46.0	3,064 fps	43,700 CUP	50.0C	3,244 fps	49,100 CUP
	AR2213SC	.243"	2.800"	49.0	2,986 fps	41,100 CUP	54.5C	3,267 fps	50,100 CUP
	AR2217	.243"	2.800"	52.0	3,001 fps	41,200 CUP	57.0C	3,236 fps	48,200 CUP
	AR2225	.243"	2.800"	52.0	3,035 fps	39,500 CUP	57.0C	3,278 fps	46,800 CUP
90 GR. SPR SP	AR2209	.243"	2.750"	44.5	3,077 fps	46,300 CUP	47.5	3,223 fps	51,800 CUP
	AR2213SC	.243"	2.750"	49.0	3,101 fps	47,100 CUP	52.5	3,272 fps	52,200 CUP
	AR2217	.243"	2.750"	52.0	3,072 fps	45,900 CUP	55.5	3,241 fps	51,900 CUP
	AR2225	.243"	2.750"	55.5	3,185 fps	46,300 CUP	59.0C	3,338 fps	51,900 CUP
100 GR. NOS PART	AR2209	.243"	2.760"	43.0	2,925 fps	46,300 CUP	46.0	3,066 fps	52,000 CUP
	AR2213SC	.243"	2.760"	48.0	2,960 fps	46,400 CUP	51.0	3,108 fps	52,100 CUP
	AR2217	.243"	2.760"	52.0	3,007 fps	47,300 CUP	55.0	3,145 fps	52,200 CUP
	AR2225	.243"	2.760"	54.0	3,018 fps	44,400 CUP	57.5	3,219 fps	51,800 CUP
105 GR. SPR SP	AR2213SC	.243"	2.800"	45.0	2,804 fps	47,700 CUP	48.0	2,978 fps	52,200 CUP
	AR2217	.243"	2.800"	47.0	2,794 fps	45,700 CUP	50.0	2,913 fps	51,600 CUP
	AR2225	.243"	2.800"	51.0	2,901 fps	45,700 CUP	54.5C	3,070 fps	52,000 CUP
107 GR. SIE HPBT	AR2213SC	.243"	2.800"	48.0	2,946 fps	48,000 CUP	51.0	3,049 fps	52,200 CUP
	AR2217	.243"	2.800"	51.0	2,879 fps	45,700 CUP	54.5	3,069 fps	52,400 CUP
	AR2225	.243"	2.800"	53.0	2,972 fps	45,700 CUP	56.5C	3,138 fps	51,800 CUP
115 GR. BAR SP	AR2213SC	.243"	2.650"	43.0	2,670 fps	46,500 CUP	46.0	2,797 fps	51,800 CUP
	AR2217	.243"	2.650"	46.0	2,682 fps	46,400 CUP	49.0	2,805 fps	52,200 CUP
	AR2225	.243"	2.650"	50.0	2,805 fps	47,500 CUP	53.0C	2,934 fps	51,900 CUP

RIFLE DATA

240 Weatherby Magnum				Case: Weatherby Twist: 1:9" Primer: Winchester LR			Barrel length: 24" Trim length: 2.490"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. SIE HP	AR2206H	.243"	3.060"	-	-	-	47.0	3,521 fps	-
	AR2213SC	.243"	3.060"	-	-	-	57.0	3,488 fps	-
75 GR. HDY HP	AR2206H	.243"	3.075"	-	-	-	46.0	3,445 fps	-
	AR2213SC	.243"	3.075"	-	-	-	56.0	3,453 fps	-
80 GR. SPR SP	AR2206H	.243"	3.060"	-	-	-	44.0	3,359 fps	-
	AR2213SC	.243"	3.060"	-	-	-	56.0	3,481 fps	-
	AR2217	.243"	3.060"	57.0	3,082 fps	-	59.0	3,207 fps	-
85 GR. SIE HPBT	AR2213SC	.243"	3.060"	-	-	-	56.0	3,460 fps	-
	AR2217	.243"	3.060"	57.0	3,043 fps	-	59.0	3,167 fps	-
90 GR. SPR SP	AR2213SC	.243"	3.060"	-	-	-	55.0	3,394 fps	-
	AR2217	.243"	3.060"	57.0	3,037 fps	-	59.0	3,140 fps	-
100 GR. NOS PART	AR2213SC	.243"	3.060"	-	-	-	53.0	3,202 fps	-
	AR2217	.243"	3.060"	57.0	3,018 fps	-	59.0	3,122 fps	-
115 GR. BAR SP	AR2213SC	.243"	3.050"	-	-	-	46.0	2,779 fps	-
	AR2217	.243"	3.050"	56.0	2,971 fps	-	58.0	3,066 fps	-
25-20 Winchester (25-20 WCF)				Case: Remington Twist: 1:14" Primer: Winchester SR			Barrel length: 24" Trim length: 1.320"		
NOTE: See Single Action Rifle section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. HDY FP	AR2205	.257"	1.600"	9.6	1,854 fps	24,200 CUP	10.2	1,962 fps	26,700 CUP
	AR2207	.257"	1.600"	12.0	1,814 fps	20,200 CUP	14.2C	2,101 fps	25,800 CUP
	AR2219	.257"	1.600"	14.0	1,799 fps	23,600 CUP	15.0C	1,900 fps	25,700 CUP
75 GR. SPR FP	AR2205	.257"	1.575"	8.3	1,521 fps	21,000 CUP	9.3	1,741 fps	27,900 CUP
	AR2207	.257"	1.575"	10.5	1,530 fps	18,100 CUP	12.8	1,877 fps	27,300 CUP
	AR2219	.257"	1.575"	12.0	1,523 fps	22,300 CUP	13.5	1,702 fps	26,700 CUP
86 GR. REM SP	AR2205	.257"	1.600"	8.0	1,444 fps	23,700 CUP	8.6	1,545 fps	27,600 CUP
	AR2207	.257"	1.600"	10.5	1,576 fps	24,500 CUP	11.5	1,673 fps	26,500 CUP
	AR2219	.257"	1.600"	11.3	1,358 fps	22,100 CUP	12.0	1,517 fps	26,300 CUP
256 Winchester Magnum				Case: Winchester Twist: 1:14" Primer: Winchester SR			Barrel length: 24" Trim length: 1.271"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. HDY SP	AR2207	.257"	1.560"	17.0	2,686 fps	-	18.0	2,794 fps	-
75 GR. SPR FP	AR2207	.257"	1.540"	14.0	2,019 fps	-	16.0	2,327 fps	-
87 GR. HDY SP	AR2207	.257"	1.775"	14.0	2,081 fps	-	15.0	2,192 fps	-

RIFLE DATA

25 Remington				Case:			Barrel length: 20"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
87 GR.	AR2207	-	-	-	-	-	21.0	2,500 fps	-
	AR2206	-	-	-	-	-	25.0	2,500 fps	-
	AR2208	-	-	-	-	-	26.0	2,500 fps	-
100 GR.	AR2207	-	-	-	-	-	20.0	2,200 fps	-
	AR2206	-	-	-	-	-	24.0	2,200 fps	-
	AR2208	-	-	-	-	-	26.0	2,200 fps	-
117 GR.	AR2207	-	-	-	-	-	18.5	2,000 fps	-
	AR2206	-	-	-	-	-	22.5	2,000 fps	-
	AR2208	-	-	-	-	-	23.5	2,000 fps	-

25-35 Winchester (25-35 WCF)				Case: Winchester			Barrel length: 24"		
				Twist: 1:8"			Trim length: 2.033"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. HDY JFP	AR2207	.257"	2.300"	20.0	2,626 fps	29,700 CUP	21.7	2,827 fps	36,100 CUP
	AR2219	.257"	2.300"	22.0	2,522 fps	27,700 CUP	24.5	2,793 fps	35,900 CUP
	Bench Mark 2	.257"	2.300"	23.0	2,626 fps	29,700 CUP	25.7	2,867 fps	36,600 CUP
	Bench Mark 8208	.257"	2.300"	25.0	2,838 fps	34,500 CUP	27.5	2,913 fps	36,300 CUP
	AR2206H	.257"	2.300"	26.0	2,796 fps	32,300 CUP	30.5C	3,014 fps	36,200 CUP
	AR2208	.257"	2.300"	28.0	2,677 fps	27,900 CUP	31.5C	2,972 fps	36,200 CUP
75 GR. SPR JFP	AR2207	.257"	2.280"	19.0	2,422 fps	32,300 CUP	20.5	2,515 fps	35,500 CUP
	AR2219	.257"	2.280"	21.0	2,256 fps	25,900 CUP	23.5	2,543 fps	35,900 CUP
	Bench Mark 2	.257"	2.280"	21.0	2,305 fps	28,600 CUP	23.0	2,502 fps	36,400 CUP
	Bench Mark 8208	.257"	2.280"	23.0	2,444 fps	29,200 CUP	25.7	2,660 fps	34,200 CUP
	AR2206H	.257"	2.280"	25.0	2,471 fps	32,000 CUP	27.4	2,689 fps	36,500 CUP
	AR2208	.257"	2.280"	26.5	2,487 fps	29,800 CUP	29.0	2,672 fps	36,300 CUP
90 GR. LFP W/GCK	AS30N	.257"	2.320"	5.0	1,284 fps	25,100 CUP	6.0	1,344 fps	34,000 CUP
	Trail Boss	.257"	2.320"	5.5	1,224 fps	22,000 CUP	8.0	1,414 fps	23,200 CUP
117 GR. HDY RN	AR2207	.257"	2.550"	16.8	1,889 fps	29,100 CUP	18.8	2,065 fps	36,100 CUP
	AR2219	.257"	2.550"	19.0	1,916 fps	27,900 CUP	21.0	2,127 fps	36,000 CUP
	Bench Mark 2	.257"	2.550"	19.0	1,902 fps	27,200 CUP	21.0	2,063 fps	32,500 CUP
	Bench Mark 8208	.257"	2.550"	20.0	1,985 fps	28,800 CUP	22.5	2,257 fps	35,700 CUP
	AR2206H	.257"	2.550"	19.5	1,875 fps	25,000 CUP	22.5	2,168 fps	36,000 CUP
	AR2208	.257"	2.550"	21.0	1,916 fps	25,800 CUP	24.5	2,244 fps	36,600 CUP

RIFLE DATA

257 Kimber				Case: Remington Twist: 1:10" Primer: CCI 400			Barrel length: 22" Trim length: 1.820"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
75 GR. HDY HP	AR2219	.257"	2.335"	27.0	2,806 fps	-	30.0	3,198 fps	-
	AR2206H	.257"	2.335"	28.0	2,756 fps	-	31.5	3,192 fps	-
87 GR. HDY SP	AR2219	.257"	2.375"	25.0	2,604 fps	-	28.0	2,868 fps	-
	AR2206H	.257"	2.375"	29.0	2,824 fps	-	31.0	3,056 fps	-
100 GR. SPR SP	AR2206H	.257"	2.390"	26.0	2,527 fps	-	28.0	2,760 fps	-
117 GR. SIE SPBT	AR2206H	.257"	2.455"	22.0	2,017 fps	-	24.0	2,223 fps	-
250-3000 Savage				Case: Remington Twist: 1:10" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 1.902"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
75 GR. HDY V-MAX	Bench Mark 2	.257"	2.475"	31.0	2,981 fps	38,300 CUP	33.0	3,102 fps	43,900 CUP
	Bench Mark 8208	.257"	2.475"	34.0	3,103 fps	37,500 CUP	37.0	3,341 fps	43,200 CUP
	AR2206H	.257"	2.475"	34.0	3,088 fps	39,400 CUP	36.5	3,256 fps	43,500 CUP
	AR2208	.257"	2.475"	36.0	3,061 fps	36,700 CUP	38.5	3,254 fps	43,200 CUP
80 GR. BAR TTSX BT	Bench Mark 2	.257"	2.500"	32.0	2,949 fps	39,300 CUP	34.0	3,090 fps	43,700 CUP
	Bench Mark 8208	.257"	2.500"	32.0	2,868 fps	36,000 CUP	34.5	3,112 fps	43,100 CUP
	AR2206H	.257"	2.500"	33.0	2,963 fps	36,600 CUP	35.0	3,121 fps	42,800 CUP
	AR2208	.257"	2.500"	35.0	2,977 fps	38,300 CUP	37.3C	3,149 fps	43,500 CUP
85 GR. NOS BT	Bench Mark 2	.257"	2.500"	29.5	2,793 fps	38,200 CUP	31.5	2,943 fps	43,200 CUP
	Bench Mark 8208	.257"	2.500"	32.0	2,897 fps	34,600 CUP	35.3	3,162 fps	44,600 CUP
	AR2206H	.257"	2.500"	33.0	2,929 fps	38,100 CUP	35.0	3,084 fps	43,600 CUP
	AR2208	.257"	2.500"	34.0	2,854 fps	35,300 CUP	37.0	3,090 fps	43,500 CUP
87 GR. SPR SP	Bench Mark 2	.257"	2.450"	30.5	2,804 fps	39,000 CUP	32.5	2,937 fps	43,000 CUP
	Bench Mark 8208	.257"	2.450"	31.5	2,864 fps	35,300 CUP	35.0	3,103 fps	44,800 CUP
	AR2206H	.257"	2.450"	33.0	2,913 fps	39,100 CUP	35.5	3,068 fps	43,700 CUP
	AR2208	.257"	2.450"	35.0	2,947 fps	40,200 CUP	37.0	3,074 fps	43,200 CUP
90 GR. SIE HPBT	Bench Mark 2	.257"	2.425"	31.0	2,831 fps	39,200 CUP	33.0	2,965 fps	43,900 CUP
	Bench Mark 8208	.257"	2.425"	32.0	2,913 fps	38,100 CUP	35.0	3,002 fps	44,200 CUP
	AR2206H	.257"	2.425"	33.0	2,901 fps	39,000 CUP	35.5	3,060 fps	43,900 CUP
	AR2208	.257"	2.425"	34.0	2,860 fps	37,300 CUP	36.5	3,021 fps	43,300 CUP
100 GR. HDY SP	Bench Mark 8208	.257"	2.500"	30.0	2,687 fps	38,300 CUP	33.0	2,862 fps	44,200 CUP
	AR2206H	.257"	2.500"	31.0	2,698 fps	38,500 CUP	33.5	2,849 fps	43,600 CUP
	AR2208	.257"	2.500"	33.0	2,750 fps	40,000 CUP	35.2	2,877 fps	43,700 CUP
	AR2209	.257"	2.500"	38.0	2,773 fps	38,500 CUP	40.5C	2,936 fps	44,100 CUP
115 GR. NOS BT	Bench Mark 8208	.257"	2.525"	28.0	2,770 fps	39,000 CUP	31.0	2,614 fps	44,400 CUP
	AR2206H	.257"	2.525"	28.5	2,440 fps	38,400 CUP	30.5	2,567 fps	43,400 CUP
	AR2208	.257"	2.525"	30.5	2,494 fps	39,400 CUP	32.5	2,611 fps	43,500 CUP
	AR2209	.257"	2.525"	34.5	2,497 fps	36,800 CUP	36.8C	2,642 fps	43,400 CUP
117 GR. SIE SPBT	Bench Mark 8208	.257"	2.475"	27.5	2,429 fps	38,200 CUP	30.6	2,594 fps	45,000 CUP
	AR2206H	.257"	2.475"	28.5	2,447 fps	38,000 CUP	30.5	2,579 fps	43,800 CUP
	AR2208	.257"	2.475"	30.0	2,493 fps	41,100 CUP	32.0	2,594 fps	43,700 CUP
	AR2209	.257"	2.475"	35.0	2,518 fps	37,900 CUP	37.0C	2,637 fps	43,400 CUP
	AR2213SC	.257"	2.475"	38.0	2,453 fps	35,900 CUP	39.0C	2,519 fps	39,600 CUP
120 GR. SFT SP	Bench Mark 8208	.257"	2.525"	26.0	2,296 fps	35,000 CUP	28.8	2,480 fps	44,200 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

250-3000 Savage				Case: Remington Twist: 1:10" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 1.902"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.257"	2.525"	27.5	2,331 fps	37,500 CUP	29.0	2,467 fps	43,400 CUP
	AR2208	.257"	2.525"	29.0	2,397 fps	37,200 CUP	31.0	2,508 fps	43,200 CUP
	AR2209	.257"	2.525"	33.5	2,443 fps	38,000 CUP	35.5	2,577 fps	43,300 CUP
	AR2213SC	.257"	2.525"	37.5	2,470 fps	39,100 CUP	39.0C	2,537 fps	42,200 CUP
25-303				Case: Twist: - Primer:			Barrel length: 24" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
87 GR.	AR2206	-	-	-	-	-	34.0	3,050 fps	-
	AR2208	-	-	-	-	-	37.0	3,050 fps	-
	AR2209	-	-	-	-	-	41.0	3,050 fps	-
100 GR.	AR2206	-	-	-	-	-	31.0	2,850 fps	-
	AR2208	-	-	-	-	-	33.5	2,850 fps	-
	AR2209	-	-	-	-	-	38.0	2,850 fps	-
117 GR.	AR2206	-	-	-	-	-	28.0	2,700 fps	-
	AR2208	-	-	-	-	-	31.0	2,700 fps	-
	AR2209	-	-	-	-	-	36.0	2,700 fps	-
25-308				Case: Twist: - Primer:			Barrel length: 24" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR.	AR2206	-	-	-	-	-	45.0	3,700 fps	-
	AR2208	-	-	-	-	-	46.5	3,700 fps	-
	AR2209	-	-	-	-	-	51.0	3,700 fps	-
87 GR.	AR2206	-	-	-	-	-	41.0	3,200 fps	-
	AR2208	-	-	-	-	-	42.5	3,200 fps	-
	AR2209	-	-	-	-	-	47.5	3,200 fps	-
100 GR.	AR2208	-	-	-	-	-	40.5	3,000 fps	-
	AR2209	-	-	-	-	-	45.5	3,000 fps	-
120 GR.	AR2209	-	-	-	-	-	43.5	2,850 fps	-

RIFLE DATA

257 Roberts				Case: Remington Twist: 1:10" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.223"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR. HDY SP	Bench Mark 2	.257"	2.535"	41.0	3,453 fps	42,200 CUP	43.7	3,671 fps	45,000 CUP
	AR2206H	.257"	2.535"	42.0	3,376 fps	36,600 CUP	46.0	3,805 fps	45,000 CUP
	AR2209	.257"	2.535"	48.0	3,290 fps	36,200 CUP	51.0	3,612 fps	44,700 CUP
	AR2213SC	.257"	2.535"	49.0	2,847 fps	23,700 CUP	53.0	3,382 fps	33,600 CUP
75 GR. HDY HP	Bench Mark 2	.257"	2.795"	39.0	3,226 fps	39,200 CUP	41.7	3,434 fps	45,000 CUP
	Bench Mark 8208	.257"	2.795"	40.5	3,390 fps	39,300 CUP	43.0	3,456 fps	44,900 CUP
	AR2206H	.257"	2.795"	40.5	3,201 fps	34,800 CUP	44.0	3,561 fps	47,300 CUP
	AR2208	.257"	2.795"	37.0	3,155 fps	34,700 CUP	41.0	3,453 fps	43,700 CUP
	AR2209	.257"	2.795"	47.0	3,129 fps	35,200 CUP	50.0	3,422 fps	44,000 CUP
80 GR. BAR TTSX BT	Bench Mark 2	.257"	2.780"	35.5	2,990 fps	36,900 CUP	39.5	3,285 fps	45,000 CUP
	Bench Mark 8208	.257"	2.780"	36.0	3,062 fps	38,400 CUP	39.8	3,284 fps	44,700 CUP
	AR2206H	.257"	2.780"	37.0	3,090 fps	38,800 CUP	40.8	3,281 fps	44,600 CUP
	AR2208	.257"	2.780"	39.0	3,061 fps	37,500 CUP	43.0	3,287 fps	45,000 CUP
	AR2209	.257"	2.780"	44.0	2,999 fps	36,000 CUP	48.5	3,290 fps	45,000 CUP
90 GR. HDY GMX	Bench Mark 8208	.257"	2.880"	33.0	2,739 fps	38,300 CUP	36.3	2,927 fps	44,100 CUP
	AR2206H	.257"	2.880"	33.0	2,739 fps	37,700 CUP	36.5	2,943 fps	44,800 CUP
	AR2208	.257"	2.880"	35.0	2,788 fps	39,100 CUP	38.0	2,968 fps	44,600 CUP
	AR2209	.257"	2.880"	38.0	2,729 fps	36,000 CUP	42.0	2,968 fps	44,200 CUP
	AR2213SC	.257"	2.880"	40.0	2,645 fps	35,200 CUP	44.5	2,925 fps	44,600 CUP
90 GR. SIE HPBT	Bench Mark 8208	.257"	2.775"	39.4	3,129 fps	40,200 CUP	42.0	3,314 fps	46,800 CUP
	AR2206H	.257"	2.775"	38.5	2,954 fps	33,600 CUP	42.0	3,372 fps	47,600 CUP
	AR2208	.257"	2.775"	36.0	2,990 fps	36,300 CUP	40.0	3,269 fps	44,900 CUP
	AR2209	.257"	2.775"	44.0	2,890 fps	36,100 CUP	46.0	3,040 fps	43,700 CUP
	AR2213SC	.257"	2.775"	48.0	2,786 fps	27,600 CUP	52.0	3,236 fps	39,500 CUP
100 GR. SPR SPBT	Bench Mark 8208	.257"	2.770"	37.1	2,991 fps	39,400 CUP	39.5	3,085 fps	44,700 CUP
	AR2206H	.257"	2.770"	35.0	2,661 fps	30,600 CUP	38.0	2,990 fps	46,100 CUP
	AR2208	.257"	2.770"	34.0	2,724 fps	34,400 CUP	38.0	2,981 fps	44,900 CUP
	AR2209	.257"	2.770"	43.0	2,833 fps	34,200 CUP	45.0	2,970 fps	45,400 CUP
	AR2213SC	.257"	2.770"	45.0	2,660 fps	29,100 CUP	49.0	3,010 fps	44,100 CUP
115 GR. NOS PART	Bench Mark 8208	.257"	2.780"	34.8	2,707 fps	39,200 CUP	37.0	2,798 fps	45,000 CUP
	AR2206H	.257"	2.780"	33.0	2,433 fps	31,200 CUP	36.0	2,702 fps	45,100 CUP
	AR2208	.257"	2.780"	31.0	2,462 fps	34,300 CUP	35.0	2,701 fps	44,900 CUP
	AR2209	.257"	2.780"	41.0	2,660 fps	40,600 CUP	43.0	2,777 fps	44,400 CUP
	AR2213SC	.257"	2.780"	43.0	2,479 fps	30,400 CUP	46.0	2,760 fps	46,000 CUP

RIFLE DATA

257 Roberts Improved				Case: Winchester (reformed)			Barrel length: 24"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
60 GR.	AR2206	-	-	-	-	-	49.0	3,650 fps	-
	AR2208	-	-	-	-	-	50.0	3,650 fps	-
	AR2209	-	-	-	-	-	53.5	3,650 fps	-
75 GR.	AR2206	-	-	-	-	-	48.0	3,500 fps	-
	AR2208	-	-	-	-	-	49.0	3,500 fps	-
	AR2209	-	-	-	-	-	52.5	3,500 fps	-
87-90 GR.	AR2206	-	-	-	-	-	45.5	3,300 fps	-
	AR2208	-	-	-	-	-	46.5	3,300 fps	-
	AR2209	-	-	-	-	-	51.0	3,300 fps	-
100 GR.	AR2206	-	-	-	-	-	42.0	3,100 fps	-
	AR2208	-	-	-	-	-	43.5	3,100 fps	-
	AR2209	-	-	-	-	-	48.0	3,100 fps	-
117-120 GR.	AR2208	-	-	-	-	-	41.5	2,900 fps	-
	AR2209	-	-	-	-	-	46.0	2,900 fps	-
25-284				Case: Winchester (reformed)			Barrel length: 26"		
				Twist: 1:10"			Trim length: 2.160"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
75 GR. HDY HP	AR2209	.257"	2.795"	48.0	3,429 fps	-	52.0	3,640 fps	-
	AR2213SC	.257"	2.795"	53.5	3,330 fps	-	58.0	3,604 fps	-
87 GR. SIE SP	AR2209	.257"	2.795"	46.0	3,180 fps	-	50.0	3,400 fps	-
	AR2213SC	.257"	2.795"	52.5	3,347 fps	-	57.0	3,544 fps	-
100 GR. SPR SP	AR2209	.257"	2.795"	43.0	2,860 fps	-	48.0	3,129 fps	-
	AR2213SC	.257"	2.795"	49.5	3,068 fps	-	54.0	3,369 fps	-
117 GR. HDY BTSP	AR2213SC	.257"	2.775"	48.0	2,882 fps	-	52.0	3,025 fps	-
120 GR. NOS PART	AR2209	.257"	2.795"	41.0	2,642 fps	-	44.0	2,916 fps	-
	AR2213SC	.257"	2.795"	45.0	2,871 fps	-	49.0	2,978 fps	-
25-06 Remington				Case: Remington			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.484"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
75 GR. HDY V-MAX	AR2206H	.257"	3.100"	45.0	3,474 fps	45,000 CUP	48.5	3,642 fps	50,800 CUP
	AR2208	.257"	3.100"	46.0	3,454 fps	43,400 CUP	49.7	3,660 fps	51,200 CUP
	AR2209	.257"	3.100"	54.0	3,460 fps	43,300 CUP	58.5	3,700 fps	50,900 CUP
	AR2213SC	.257"	3.100"	58.0	3,393 fps	41,800 CUP	62.0C	3,599 fps	49,300 CUP
	AR2217	.257"	3.100"	58.0	3,135 fps	35,300 CUP	62.0C	3,339 fps	40,000 CUP
80 GR. BAR TTSX BT	AR2206H	.257"	3.075"	43.0	3,408 fps	52,100 PSI	47.5	3,630 fps	61,500 PSI
	AR2208	.257"	3.075"	45.0	3,389 fps	51,800 PSI	49.0	3,613 fps	60,900 PSI
	AR2209	.257"	3.075"	51.0	3,347 fps	48,500 PSI	55.0C	3,560 fps	56,900 PSI
85 GR. NOS BT	AR2206H	.257"	3.230"	41.0	3,176 fps	44,600 CUP	44.5	3,369 fps	51,600 CUP
	AR2208	.257"	3.230"	43.0	3,271 fps	45,000 CUP	46.5	3,449 fps	50,900 CUP
	AR2209	.257"	3.230"	49.0	3,255 fps	44,400 CUP	53.0	3,445 fps	50,700 CUP

RIFLE DATA

25-06 Remington				Case: Remington Twist: 1:10" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2213SC	.257"	3.230"	54.0	3,302 fps	46,000 CUP	58.0	3,473 fps	51,700 CUP
	AR2217	.257"	3.230"	58.0	3,218 fps	41,000 CUP	62.0C	3,442 fps	48,100 CUP
87 GR. SPR HP	AR2206H	.257"	3.115"	43.0	3,243 fps	47,700 CUP	45.5	3,364 fps	51,600 CUP
	AR2208	.257"	3.115"	43.0	3,231 fps	44,900 CUP	46.0	3,382 fps	50,500 CUP
	AR2209	.257"	3.115"	50.0	3,234 fps	45,600 CUP	54.5	3,409 fps	50,800 CUP
	AR2213SC	.257"	3.115"	56.0	3,232 fps	43,500 CUP	60.0	3,421 fps	50,500 CUP
	AR2217	.257"	3.115"	58.0	3,176 fps	36,200 CUP	62.0C	3,296 fps	43,700 CUP
90 GR. HDY GMX	AR2206H	.257"	3.115"	39.0	3,053 fps	50,800 PSI	43.0	3,281 fps	60,200 PSI
	AR2208	.257"	3.115"	41.0	3,098 fps	51,600 PSI	44.0	3,261 fps	58,800 PSI
	AR2209	.257"	3.115"	45.0	3,117 fps	51,300 PSI	49.5	3,344 fps	60,600 PSI
	AR2213SC	.257"	3.115"	50.0	3,205 fps	56,200 PSI	54.5C	3,363 fps	61,000 PSI
	AR2217	.257"	3.115"	56.0	3,248 fps	54,900 PSI	60.0C	3,377 fps	59,300 PSI
	AR2225	.257"	3.115"	56.0	3,250 fps	51,000 PSI	60.0C	3,432 fps	58,700 PSI
90 GR. SIE HPBT	AR2206H	.257"	3.100"	41.0	3,128 fps	44,100 CUP	44.0	3,257 fps	51,000 CUP
	AR2208	.257"	3.100"	42.0	3,165 fps	45,000 CUP	45.0	3,312 fps	50,400 CUP
	AR2209	.257"	3.100"	49.0	3,191 fps	44,000 CUP	53.0	3,370 fps	50,700 CUP
	AR2213SC	.257"	3.100"	54.0	3,213 fps	46,000 CUP	58.0	3,481 fps	50,400 CUP
	AR2217	.257"	3.100"	58.0	3,142 fps	40,300 CUP	62.0C	3,330 fps	47,500 CUP
100 GR. NOS PART	Trail Boss	.257"	3.200"	13.4	1,454 fps	25,500 PSI	19.2	1,712 fps	30,600 PSI
	AR2206H	.257"	3.200"	40.0	2,921 fps	44,200 CUP	43.0	3,072 fps	51,000 CUP
	AR2208	.257"	3.200"	41.0	2,974 fps	45,600 CUP	44.0	3,125 fps	51,400 CUP
	AR2209	.257"	3.200"	47.0	3,038 fps	47,800 CUP	50.0	3,155 fps	51,500 CUP
	AR2213SC	.257"	3.200"	51.0	3,025 fps	46,800 CUP	54.3	3,172 fps	51,400 CUP
	AR2217	.257"	3.200"	56.0	3,055 fps	44,600 CUP	59.7C	3,212 fps	50,700 CUP
117 GR. HDY SPBT	AR2206H	.257"	3.165"	37.0	2,641 fps	44,500 CUP	40.0	2,797 fps	50,600 CUP
	AR2208	.257"	3.165"	37.0	2,637 fps	42,900 CUP	41.0	2,838 fps	50,100 CUP
	AR2209	.257"	3.165"	44.0	2,737 fps	44,300 CUP	47.7	2,923 fps	50,800 CUP
	AR2213SC	.257"	3.165"	48.0	2,748 fps	43,000 CUP	52.0	2,937 fps	50,900 CUP
	AR2217	.257"	3.165"	55.0	2,936 fps	47,200 CUP	58.5C	3,046 fps	51,000 CUP
	AR2225	.257"	3.165"	56.0	2,876 fps	44,600 CUP	60.5C	3,079 fps	50,700 CUP
120 GR. SFT SP	AR2206H	.257"	3.150"	37.0	2,541 fps	45,400 CUP	40.0	2,694 fps	51,700 CUP
	AR2208	.257"	3.150"	38.0	2,584 fps	45,100 CUP	41.0	2,755 fps	51,900 CUP
	AR2209	.257"	3.150"	44.0	2,643 fps	42,900 CUP	47.5	2,816 fps	50,900 CUP
	AR2213SC	.257"	3.150"	48.0	2,705 fps	45,800 CUP	51.5	2,856 fps	51,200 CUP
	AR2217	.257"	3.150"	52.0	2,772 fps	44,900 CUP	55.5	2,902 fps	50,600 CUP
	AR2225	.257"	3.150"	56.0	2,806 fps	43,700 CUP	60.0C	2,991 fps	50,300 CUP

RIFLE DATA

25 Winchester Super Short Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 1.660"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
75 GR. HDY V-MAX	Bench Mark 8208	.257"	2.350"	40.0	3,341 fps	47,200 PSI	45.0	3,687 fps	62,700 PSI
	AR2206H	.257"	2.350"	42.0	3,473 fps	49,700 PSI	45.2	3,708 fps	61,800 PSI
	AR2208	.257"	2.350"	43.0	3,437 fps	49,700 PSI	46.5	3,677 fps	62,200 PSI
85 GR. NOS BT	Bench Mark 8208	.257"	2.350"	38.0	3,174 fps	48,900 PSI	42.4	3,456 fps	62,600 PSI
	AR2206H	.257"	2.350"	40.0	3,268 fps	50,700 PSI	43.3	3,475 fps	62,100 PSI
	AR2208	.257"	2.350"	40.0	3,180 fps	46,200 PSI	44.9	3,497 fps	62,200 PSI
87 GR. SIE SP	Bench Mark 8208	.257"	2.300"	38.0	3,152 fps	49,500 PSI	42.7	3,423 fps	62,100 PSI
	AR2206H	.257"	2.300"	40.0	3,271 fps	53,000 PSI	43.3	3,456 fps	62,300 PSI
	AR2208	.257"	2.300"	40.0	3,189 fps	49,800 PSI	44.0	3,431 fps	62,600 PSI
100 GR. SPR BT	Bench Mark 8208	.257"	2.300"	36.0	2,954 fps	51,200 PSI	40.0	3,166 fps	62,100 PSI
	AR2206H	.257"	2.300"	38.0	3,042 fps	50,500 PSI	41.5	3,243 fps	61,700 PSI
	AR2208	.257"	2.300"	39.0	3,022 fps	50,000 PSI	42.8	3,248 fps	62,700 PSI
	AR2209	.257"	2.300"	45.0	3,035 fps	51,400 PSI	48.5C	3,233 fps	61,300 PSI
115 GR. NOS BT	Bench Mark 8208	.257"	2.350"	33.0	2,648 fps	51,000 PSI	37.0	2,877 fps	63,000 PSI
	AR2206H	.257"	2.350"	34.0	2,658 fps	51,600 PSI	37.0	2,830 fps	62,200 PSI
	AR2208	.257"	2.350"	36.0	2,726 fps	53,700 PSI	38.7	2,871 fps	62,600 PSI
	AR2209	.257"	2.350"	42.0	2,806 fps	52,800 PSI	45.3C	2,999 fps	63,000 PSI
	AR2213SC	.257"	2.350"	44.0	2,733 fps	52,100 PSI	47.0C	2,883 fps	60,900 PSI
117 GR. HDY BTSP	Bench Mark 8208	.257"	2.335"	33.0	2,629 fps	49,200 PSI	36.7	2,851 fps	61,700 PSI
	AR2206H	.257"	2.335"	35.0	2,723 fps	53,800 PSI	37.5	2,858 fps	62,200 PSI
	AR2208	.257"	2.335"	36.0	2,725 fps	52,700 PSI	39.0	2,888 fps	62,200 PSI
	AR2209	.257"	2.335"	42.0	2,796 fps	52,300 PSI	45.0	2,965 fps	62,300 PSI
	AR2213SC	.257"	2.335"	44.0	2,731 fps	51,100 PSI	47.5C	2,901 fps	61,300 PSI
120 GR. SFT SP	Bench Mark 8208	.257"	2.330"	32.0	2,542 fps	48,300 PSI	36.3	2,800 fps	62,900 PSI
	AR2206H	.257"	2.330"	35.0	2,700 fps	53,300 PSI	37.7	2,840 fps	61,700 PSI
	AR2208	.257"	2.330"	36.0	2,702 fps	53,200 PSI	39.0	2,878 fps	63,500 PSI
	AR2209	.257"	2.330"	42.0	2,793 fps	51,000 PSI	45.5C	2,981 fps	62,400 PSI
	AR2213SC	.257"	2.330"	45.0	2,744 fps	51,600 PSI	48.0C	2,902 fps	61,100 PSI
257 Weatherby Magnum				Case: Weatherby Twist: 1:10" Primer: Federal 215			Barrel length: 26" Trim length: 2.535"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
75 GR. HDY V-MAX	AR2209	.257"	3.250"	65.0	3,715 fps	43,100 CUP	70.0	3,905 fps	51,800 CUP
	AR2213SC	.257"	3.250"	71.0	3,652 fps	45,200 CUP	75.0	3,841 fps	51,900 CUP
	AR2217	.257"	3.250"	76.0	3,517 fps	37,700 CUP	80.0C	3,649 fps	42,000 CUP
85 GR. NOS BT	AR2209	.257"	3.250"	63.0	3,544 fps	44,400 CUP	67.0	3,739 fps	51,600 CUP
	AR2213SC	.257"	3.250"	68.0	3,498 fps	45,000 CUP	72.0	3,664 fps	52,200 CUP
	AR2217	.257"	3.250"	76.0	3,548 fps	44,600 CUP	80.0C	3,665 fps	47,900 CUP
90 GR. SIE HPBT	AR2209	.257"	3.150"	62.5	3,524 fps	46,600 CUP	66.5	3,685 fps	52,400 CUP
	AR2213SC	.257"	3.150"	67.0	3,420 fps	44,400 CUP	71.0	3,611 fps	52,500 CUP
	AR2217	.257"	3.150"	76.0	3,494 fps	43,800 CUP	80.0C	3,671 fps	50,000 CUP
100 GR. SPR SPBT	AR2209	.257"	3.200"	59.0	3,312 fps	44,900 CUP	63.0	3,500 fps	52,400 CUP
	AR2213SC	.257"	3.200"	64.0	3,312 fps	45,800 CUP	68.0	3,462 fps	52,500 CUP
	AR2217	.257"	3.200"	73.0	3,410 fps	45,800 CUP	78.0	3,575 fps	52,400 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

257 Weatherby Magnum				Case: Weatherby Twist: 1:10" Primer: Federal 215			Barrel length: 26" Trim length: 2.535"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
115 GR. BAR XFB	AR2209	.257"	3.250"	56.0	2,988 fps	46,900 CUP	60.0	3,188 fps	52,500 CUP
	AR2213SC	.257"	3.250"	60.0	3,030 fps	46,200 CUP	64.0	3,170 fps	52,000 CUP
	AR2217	.257"	3.250"	67.0	3,147 fps	50,000 CUP	71.0	3,265 fps	52,700 CUP
117 GR. HDY SPBT	AR2209	.257"	3.220"	57.0	3,112 fps	46,000 CUP	60.5	3,266 fps	52,000 CUP
	AR2213SC	.257"	3.220"	62.0	3,099 fps	44,800 CUP	66.0	3,252 fps	52,300 CUP
	AR2217	.257"	3.220"	70.0	3,169 fps	45,200 CUP	74.0	3,321 fps	51,800 CUP
120 GR. SFT SP	AR2209	.257"	3.220"	56.0	3,000 fps	44,400 CUP	60.0	3,189 fps	51,800 CUP
	AR2213SC	.257"	3.220"	61.0	3,013 fps	44,600 CUP	65.0	3,184 fps	51,800 CUP
	AR2217	.257"	3.220"	69.0	3,103 fps	45,700 CUP	73.0	3,256 fps	51,800 CUP
6.5mm Grendel				Case: Lapua Twist: 1:9" Primer: Federal 205M			Barrel length: 24" Trim length: 1.515"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE HP	AR2207	.264"	2.240"	24.5	2,674 fps	38,500 PSI	27.2C	2,919 fps	49,500 PSI
	AR2219	.264"	2.240"	27.0	2,625 fps	36,600 PSI	30.1C	2,927 fps	49,400 PSI
90 GR. SPR TNT HP	AR2207	.264"	2.200"	24.0	2,594 fps	36,800 PSI	26.8C	2,854 fps	49,400 PSI
	AR2219	.264"	2.200"	26.5	2,534 fps	34,600 PSI	29.5C	2,863 fps	49,500 PSI
	Bench Mark 2	.264"	2.200"	28.5	2,662 fps	37,700 PSI	30.5C	2,870 fps	47,000 PSI
	Bench Mark 8208	.264"	2.220"	29.0	2,580 fps	34,700 PSI	31.0C	2,794 fps	42,400 PSI
95 GR. HDY V-MAX	AR2207	.264"	2.230"	23.0	2,483 fps	36,600 PSI	25.8C	2,750 fps	49,300 PSI
	AR2219	.264"	2.230"	26.0	2,477 fps	35,900 PSI	28.8C	2,768 fps	49,300 PSI
	Bench Mark 2	.264"	2.230"	27.0	2,476 fps	33,900 PSI	30.0C	2,807 fps	49,700 PSI
	Bench Mark 8208	.264"	2.230"	28.0	2,527 fps	35,600 PSI	31.0C	2,840 fps	49,600 PSI
100 GR. NOS BT	AR2207	.264"	2.200"	23.0	2,414 fps	36,800 PSI	25.6C	2,666 fps	49,800 PSI
	AR2219	.264"	2.200"	26.0	2,420 fps	36,700 PSI	29.0C	2,716 fps	49,800 PSI
	Bench Mark 2	.264"	2.200"	27.0	2,460 fps	36,300 PSI	29.9C	2,739 fps	49,900 PSI
	Bench Mark 8208	.264"	2.200"	29.0	2,542 fps	38,300 PSI	30.8C	2,732 fps	47,600 PSI
107 GR. SIE HPBT	AR2207	.264"	2.250"	22.0	2,324 fps	37,000 PSI	24.8	2,576 fps	49,900 PSI
	AR2219	.264"	2.250"	25.0	2,325 fps	35,900 PSI	27.7C	2,607 fps	49,800 PSI
	Bench Mark 2	.264"	2.250"	26.0	2,355 fps	34,800 PSI	29.0C	2,653 fps	49,600 PSI
	Bench Mark 8208	.264"	2.250"	27.0	2,356 fps	34,600 PSI	29.8C	2,667 fps	49,300 PSI
120 GR. BAR TSX	AR2207	.264"	2.200"	20.5	2,074 fps	41,000 PSI	22.9C	2,272 fps	49,700 PSI
	AR2219	.264"	2.200"	23.0	2,074 fps	37,700 PSI	25.8C	2,347 fps	50,000 PSI
	Bench Mark 2	.264"	2.200"	24.5	2,133 fps	36,900 PSI	27.3	2,401 fps	50,200 PSI
	Bench Mark 8208	.264"	2.200"	25.0	2,094 fps	34,600 PSI	28.0C	2,419 fps	50,000 PSI
123 GR. SIE HPBT	AR2207	.264"	2.250"	21.0	2,153 fps	37,700 PSI	23.7C	2,375 fps	50,000 PSI
	AR2219	.264"	2.250"	24.0	2,192 fps	36,600 PSI	26.6C	2,434 fps	49,900 PSI
	Bench Mark 2	.264"	2.250"	25.0	2,225 fps	36,900 PSI	27.5C	2,460 fps	49,900 PSI
	Bench Mark 8208	.264"	2.250"	25.5	2,180 fps	33,900 PSI	28.5C	2,497 fps	50,000 PSI

RIFLE DATA

6.5mm BR				Case: Remington (reformed) Twist: 1:8" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.510"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SPR TNT HP	AR2219	.264"	2.140"	29.0	2,749 fps	39,400 CUP	31.0	2,919 fps	49,100 CUP
	Bench Mark 2	.264"	2.140"	29.7	2,807 fps	42,300 CUP	31.7	2,953 fps	49,100 CUP
	Bench Mark 8208	.264"	2.140"	31.0	2,799 fps	39,800 CUP	33.2C	3,017 fps	46,500 CUP
	AR2206H	.264"	2.140"	31.0	2,714 fps	35,800 CUP	33.0C	2,923 fps	44,100 CUP
	AR2208	.264"	2.140"	31.0	2,670 fps	35,400 CUP	33.0C	2,835 fps	41,500 CUP
95 GR. HDY V-MAX	AR2219	.264"	2.220"	28.8	2,722 fps	40,300 CUP	30.7	2,894 fps	50,000 CUP
	Bench Mark 2	.264"	2.220"	29.0	2,740 fps	43,200 CUP	31.0	2,871 fps	49,000 CUP
	Bench Mark 8208	.264"	2.220"	30.0	2,725 fps	38,700 CUP	33.0C	2,992 fps	50,100 CUP
	AR2206H	.264"	2.220"	31.0	2,774 fps	40,000 CUP	33.0C	2,946 fps	48,500 CUP
	AR2208	.264"	2.220"	31.0	2,698 fps	40,000 CUP	33.0C	2,843 fps	45,900 CUP
100 GR. NOS BT	AR2219	.264"	2.220"	28.0	2,601 fps	39,400 CUP	29.7	2,772 fps	50,200 CUP
	Bench Mark 2	.264"	2.220"	28.3	2,584 fps	41,700 CUP	30.2	2,748 fps	49,400 CUP
	Bench Mark 8208	.264"	2.220"	29.0	2,624 fps	38,400 CUP	32.0C	2,887 fps	50,000 CUP
	AR2206H	.264"	2.220"	31.0	2,702 fps	41,700 CUP	33.0C	2,878 fps	49,100 CUP
	AR2208	.264"	2.220"	31.0	2,635 fps	39,600 CUP	33.0C	2,797 fps	48,700 CUP
107 GR. SIE HPBT	AR2219	.264"	2.340"	27.2	2,563 fps	39,100 CUP	29.0	2,738 fps	49,800 CUP
	Bench Mark 2	.264"	2.340"	27.8	2,587 fps	40,200 CUP	29.6	2,741 fps	49,400 CUP
	Bench Mark 8208	.264"	2.340"	28.0	2,532 fps	37,600 CUP	31.3	2,817 fps	49,500 CUP
	AR2206H	.264"	2.340"	29.8	2,623 fps	38,900 CUP	31.8C	2,811 fps	47,900 CUP
	AR2208	.264"	2.340"	30.5	2,658 fps	41,800 CUP	32.5C	2,798 fps	48,500 CUP
120 GR. NOS BT	AR2219	.264"	2.250"	26.7	2,403 fps	40,800 CUP	28.5	2,549 fps	49,500 CUP
	Bench Mark 2	.264"	2.250"	27.2	2,445 fps	43,800 CUP	29.0	2,569 fps	50,000 CUP
	Bench Mark 8208	.264"	2.250"	27.0	2,375 fps	37,500 CUP	30.2	2,623 fps	50,200 CUP
	AR2206H	.264"	2.250"	29.0	2,475 fps	41,300 CUP	31.0C	2,624 fps	47,700 CUP
	AR2208	.264"	2.250"	29.0	2,409 fps	39,400 CUP	31.0C	2,542 fps	45,100 CUP
129 GR. HDY SP	AR2219	.264"	2.280"	26.0	2,293 fps	44,500 CUP	27.7	2,417 fps	49,200 CUP
	Bench Mark 2	.264"	2.280"	26.3	2,285 fps	43,800 CUP	28.0	2,411 fps	49,600 CUP
	Bench Mark 8208	.264"	2.280"	27.0	2,314 fps	39,100 CUP	29.8	2,514 fps	49,600 CUP
	AR2206H	.264"	2.280"	28.4	2,378 fps	44,200 CUP	30.3C	2,502 fps	49,400 CUP
	AR2208	.264"	2.280"	29.0	2,371 fps	44,200 CUP	31.0C	2,494 fps	49,900 CUP
140 GR. SPR SP	AR2219	.264"	2.300"	25.0	2,199 fps	43,900 CUP	26.7	2,299 fps	50,200 CUP
	Bench Mark 2	.264"	2.300"	26.3	2,233 fps	44,200 CUP	28.0	2,362 fps	49,800 CUP
	Bench Mark 8208	.264"	2.300"	26.0	2,186 fps	39,200 CUP	28.8	2,391 fps	50,300 CUP
	AR2206H	.264"	2.300"	28.2	2,298 fps	44,200 CUP	30.0C	2,421 fps	49,000 CUP
	AR2208	.264"	2.300"	28.3	2,278 fps	42,100 CUP	30.2C	2,415 fps	49,000 CUP
142 GR. SIE HPBT	AR2219	.264"	2.350"	24.5	2,199 fps	44,200 CUP	26.1	2,293 fps	49,400 CUP
	Bench Mark 2	.264"	2.350"	25.2	2,232 fps	45,500 CUP	26.9	2,326 fps	49,900 CUP
	Bench Mark 8208	.264"	2.350"	26.0	2,231 fps	40,000 CUP	28.8	2,426 fps	49,800 CUP
	AR2206H	.264"	2.350"	27.3	2,271 fps	41,900 CUP	29.0	2,395 fps	49,300 CUP
	AR2208	.264"	2.350"	27.9	2,250 fps	40,900 CUP	29.7C	2,396 fps	49,600 CUP

RIFLE DATA

6.5 x 50mm Japanese				Case: Norma Twist: 1:9" Primer: Federal 210			Barrel length: 32" Trim length: 1.998"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SIE SP	AR2206H	.264"	2.700"	35.0	2,408 fps	-	37.0	2,717 fps	-
	AR2213SC	.264"	2.700"	39.0	2,350 fps	-	41.0	2,424 fps	-
120 GR. SPR SP	AR2206H	.264"	2.920"	33.0	2,368 fps	-	35.0	2,505 fps	-
	AR2213SC	.264"	2.920"	39.0	2,300 fps	-	41.0	2,429 fps	-
140 GR. NOS PART	AR2206H	.264"	2.920"	32.0	2,186 fps	-	34.0	2,407 fps	-
	AR2213SC	.264"	2.920"	38.0	2,222 fps	-	41.0	2,392 fps	-
160 GR. HDY RN	AR2206H	.264"	2.855"	30.0	2,118 fps	-	32.0	2,334 fps	-
	AR2213SC	.264"	2.855"	36.0	2,201 fps	-	38.0	2,393 fps	-
6.5mm Carcano (6.5 x 52mm)				Case: Norma Twist: 1:- Primer: Federal 210			Barrel length: 21" Trim length: 2.057"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY SP	AR2206H	.264"	2.835"	31.0	2,204 fps	-	33.0	2,394 fps	-
	AR2213SC	.264"	2.835"	40.0	2,189 fps	-	43.0	2,414 fps	-
120 GR. HDY SP	AR2206H	.264"	2.835"	28.0	1,959 fps	-	30.0	2,147 fps	-
	AR2213SC	.264"	2.835"	38.0	2,019 fps	-	41.0	2,224 fps	-
140 GR. NOS PART	AR2206H	.264"	2.900"	28.0	1,904 fps	-	30.0	2,089 fps	-
	AR2213SC	.264"	2.900"	37.0	1,919 fps	-	40.0	2,192 fps	-
160 GR. HDY RN	AR2206H	.264"	2.935"	27.0	1,804 fps	-	30.0	1,992 fps	-
	AR2213SC	.264"	2.935"	37.0	1,891 fps	-	39.0	2,086 fps	-
6.5 x 54mm Mauser				Case: Twist: - Primer:			Barrel length: 20" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
120-125 GR.	AR2208	-	-	-	-	-	35.0	2,500 fps	-
	AR2206	-	-	-	-	-	33.0	2,500 fps	-
140 GR.	AR2206	-	-	-	-	-	30.0	2,200 fps	-
	AR2208	-	-	-	-	-	32.0	2,200 fps	-
6.5 x 54mm (Mannlicher-Schoenauer)				Case: Twist: - Primer:			Barrel length: 18" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR.	AR2206	-	-	-	-	-	38.0	2,800 fps	-
	AR2208	-	-	-	-	-	40.0	2,800 fps	-
120 GR.	AR2206	-	-	-	-	-	36.5	2,700 fps	-
	AR2208	-	-	-	-	-	38.5	2,700 fps	-
	AR2209	-	-	-	-	-	42.5	2,700 fps	-
129-130 GR.	AR2206	-	-	-	-	-	35.5	2,500 fps	-
	AR2208	-	-	-	-	-	37.5	2,500 fps	-
	AR2209	-	-	-	-	-	41.5	2,500 fps	-

RIFLE DATA

6.5 x 54mm (Mannlicher-Schoenauer)				Case:			Barrel length: 18"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
140 GR.	AR2206	-	-	-	-	-	33.5	2,350 fps	-
	AR2208	-	-	-	-	-	35.5	2,350 fps	-
	AR2209	-	-	-	-	-	39.5	2,350 fps	-
160 GR.	AR2206	-	-	-	-	-	31.5	2,100 fps	-
	AR2208	-	-	-	-	-	33.5	2,100 fps	-
	AR2209	-	-	-	-	-	37.5	2,100 fps	-

6.5 Creedmoor				Case: Hornady			Barrel length: 24"		
				Twist: 1:8"			Trim length: 1.910"		
				Primer: Federal 210M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
95 GR. HDY V-MAX	Bench Mark 8208	.264"	2.670"	36.0	3,041 fps	50,800 PSI	40.0	3,228 fps	58,900 PSI
	AR2206H	.264"	2.670"	37.0	3,059 fps	50,400 PSI	41.0	3,276 fps	60,300 PSI
	AR2208	.264"	2.670"	39.0	3,051 fps	49,000 PSI	43.0	3,286 fps	60,100 PSI
	AR2209	.264"	2.670"	43.0	2,972 fps	45,000 PSI	47.0C	3,224 fps	56,100 PSI
100 GR. BAR TTSX BT	Bench Mark 8208	.264"	2.655"	33.2	2,812 fps	49,300 PSI	37.4	3,056 fps	60,900 PSI
	AR2206H	.264"	2.655"	33.1	2,819 fps	49,100 PSI	37.3	3,063 fps	61,000 PSI
	AR2208	.264"	2.655"	34.8	2,867 fps	50,700 PSI	39.0	3,101 fps	62,100 PSI
	AR2209	.264"	2.655"	39.9	2,895 fps	49,200 PSI	44.7	3,133 fps	60,300 PSI
100 GR. NOS BT	Bench Mark 8208	.264"	2.760"	34.0	2,850 fps	48,700 PSI	38.0	3,087 fps	60,000 PSI
	AR2206H	.264"	2.760"	35.0	2,878 fps	49,400 PSI	38.5	3,097 fps	59,300 PSI
	AR2208	.264"	2.760"	36.5	2,888 fps	48,900 PSI	40.5	3,122 fps	60,300 PSI
	AR2209	.264"	2.760"	40.5	2,905 fps	48,500 PSI	45.0C	3,156 fps	59,800 PSI
107 GR. SIE HPBT	Bench Mark 8208	.264"	2.780"	34.0	2,812 fps	48,900 PSI	37.8	3,027 fps	59,700 PSI
	AR2206H	.264"	2.780"	35.0	2,846 fps	49,400 PSI	39.0	3,073 fps	60,900 PSI
	AR2208	.264"	2.780"	37.0	2,863 fps	48,600 PSI	41.0	3,093 fps	60,200 PSI
	AR2209	.264"	2.780"	41.0	2,829 fps	45,300 PSI	46.0C	3,139 fps	60,900 PSI
120 GR. HDY A-MAX	Bench Mark 8208	.264"	2.670"	32.0	2,564 fps	45,800 PSI	36.0	2,818 fps	60,300 PSI
	AR2206H	.264"	2.670"	34.0	2,672 fps	50,500 PSI	37.4	2,858 fps	60,400 PSI
	AR2208	.264"	2.670"	36.0	2,668 fps	49,600 PSI	40.2	2,891 fps	60,400 PSI
	AR2209	.264"	2.670"	40.5	2,709 fps	47,700 PSI	45.0C	2,965 fps	60,800 PSI
123 GR. SIE HPBT	Bench Mark 8208	.264"	2.670"	32.0	2,570 fps	46,100 PSI	36.0	2,806 fps	59,000 PSI
	AR2208	.264"	2.670"	36.0	2,712 fps	51,100 PSI	39.8	2,887 fps	59,200 PSI
	AR2209	.264"	2.670"	40.0	2,680 fps	45,500 PSI	44.8	2,951 fps	59,700 PSI
130 GR. NOS AB	Bench Mark 8208	.264"	2.750"	30.5	2,378 fps	49,700 PSI	34.0	2,589 fps	61,200 PSI
	AR2206H	.264"	2.750"	30.1	2,361 fps	48,500 PSI	33.8	2,583 fps	61,200 PSI
	AR2208	.264"	2.750"	31.4	2,414 fps	51,500 PSI	34.9	2,610 fps	61,400 PSI
	AR2209	.264"	2.750"	35.2	2,464 fps	49,300 PSI	39.2	2,687 fps	60,400 PSI
140 GR. HDY A-MAX	Bench Mark 8208	.264"	2.820"	30.0	2,335 fps	49,200 PSI	32.8	2,511 fps	59,300 PSI
	AR2206H	.264"	2.820"	30.0	2,316 fps	46,800 PSI	34.0	2,555 fps	60,400 PSI
	AR2208	.264"	2.820"	32.0	2,371 fps	47,400 PSI	35.8	2,598 fps	59,900 PSI
	AR2209	.264"	2.820"	36.0	2,464 fps	49,200 PSI	40.0C	2,660 fps	59,200 PSI
142 GR. SIE HPBT	Bench Mark 8208	.264"	2.780"	32.2	2,431 fps	51,500 PSI	33.5	2,518 fps	58,000 PSI
	AR2206H	.264"	2.780"	32.4	2,426 fps	49,800 PSI	34.5	2,551 fps	58,000 PSI
	AR2208	.264"	2.780"	34.5	2,489 fps	52,600 PSI	36.3	2,598 fps	60,100 PSI

C = Compressed Load: L = Lead Projectile

RIFLE DATA

6.5 Creedmoor				Case: Hornady Twist: 1:8" Primer: Federal 210M			Barrel length: 24" Trim length: 1.910"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2209	.264"	2.780"	38.8	2,573 fps	52,300 PSI	41.5	2,694 fps	59,800 PSI
260 Remington				Case: Remington Twist: 1:9" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.025"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
95 GR. HDY V-MAX	Bench Mark 2	.264"	2.780"	40.0	3,190 fps	51,400 PSI	43.5	3,391 fps	59,600 PSI
	Bench Mark 8208	.264"	2.780"	37.6	3,038 fps	51,900 PSI	40.0	3,166 fps	58,200 PSI
95 GR.	AR2206	-	-	37.0	3,045 fps	51,200 PSI	39.5	3,225 fps	58,400 PSI
95 GR. HDY V-MAX	AR2206H	.264"	2.780"	38.0	3,069 fps	51,300 PSI	40.8	3,225 fps	58,500 PSI
	AR2208	.264"	2.780"	39.0	3,070 fps	50,200 PSI	42.0	3,244 fps	58,500 PSI
	AR2209	.264"	2.780"	47.0	3,135 fps	51,200 PSI	49.7	3,284 fps	58,100 PSI
100 GR. BAR XFB	Bench Mark 2	.264"	2.750"	38.0	2,981 fps	50,700 PSI	41.0	3,171 fps	59,900 PSI
100 GR.	AR2206	-	-	33.0	2,790 fps	51,150 PSI	37.0	3,055 fps	58,750 PSI
100 GR. BAR XFB	AR2206H	.264"	2.750"	35.0	2,810 fps	51,300 PSI	38.0	2,974 fps	58,800 PSI
	AR2208	.264"	2.750"	36.5	2,861 fps	52,000 PSI	39.5	3,027 fps	58,900 PSI
	AR2209	.264"	2.750"	42.0	2,946 fps	52,900 PSI	45.0	3,077 fps	58,200 PSI
	AR2213SC	.264"	2.750"	46.0	2,925 fps	52,800 PSI	48.8C	3,055 fps	58,600 PSI
107 GR. SIE HPBT	Bench Mark 2	.264"	2.780"	40.0	3,158 fps	50,900 PSI	42.5	3,227 fps	59,500 PSI
	Bench Mark 8208	.264"	2.780"	37.2	2,900 fps	52,300 PSI	39.1	3,001 fps	57,900 PSI
107 GR.	AR2206	-	-	37.0	2,945 fps	51,800 PSI	39.5	3,055 fps	58,200 PSI
107 GR. SIE HPBT	AR2206H	.264"	2.780"	38.0	2,950 fps	51,900 PSI	40.7	3,074 fps	58,000 PSI
	AR2208	.264"	2.780"	38.5	2,947 fps	49,800 PSI	41.5	3,125 fps	58,700 PSI
	AR2209	.264"	2.780"	46.0	2,997 fps	50,400 PSI	49.0	3,164 fps	58,700 PSI
	AR2213SC	.264"	2.780"	50.0	2,963 fps	50,300 PSI	51.0C	3,027 fps	54,000 PSI
120 GR. SPR SP	Bench Mark 2	.264"	2.780"	37.0	2,768 fps	51,200 PSI	40.0	2,935 fps	59,500 PSI
120 GR.	AR2206	-	-	34.3	2,555 fps	51,700 PSI	37.0	2,795 fps	58,750 PSI
120 GR. SPR SP	AR2206H	.264"	2.780"	35.0	2,664 fps	51,900 PSI	38.0	2,813 fps	58,900 PSI
	AR2208	.264"	2.780"	36.0	2,716 fps	50,300 PSI	39.0	2,877 fps	58,300 PSI
	AR2209	.264"	2.780"	43.5	2,814 fps	51,400 PSI	46.5	2,960 fps	58,200 PSI
	AR2213SC	.264"	2.780"	47.0	2,812 fps	52,100 PSI	50.0C	2,954 fps	59,200 PSI
	AR2217	.264"	2.780"	49.0	2,710 fps	44,600 PSI	51.0C	2,810 fps	49,300 PSI
125 GR.	AR2206	-	-	33.2	2,615 fps	54,150 PSI	36.2	2,735 fps	58,800 PSI
125 GR. NOS PART	AR2206H	.264"	2.780"	34.0	2,623 fps	54,300 PSI	37.0	2,743 fps	58,900 PSI
	AR2208	.264"	2.780"	34.5	2,624 fps	51,200 PSI	37.5	2,785 fps	58,400 PSI
	AR2209	.264"	2.780"	41.0	2,714 fps	50,900 PSI	44.3	2,867 fps	57,900 PSI
	AR2213SC	.264"	2.780"	45.0	2,725 fps	51,600 PSI	48.0C	2,862 fps	58,000 PSI
	AR2217	.264"	2.780"	48.0	2,685 fps	46,300 PSI	51.0C	2,821 fps	53,300 PSI
140 GR.	AR2206	-	-	31.3	2,350 fps	50,500 PSI	33.5	2,510 fps	58,400 PSI
140 GR. NOS PART	AR2206H	.264"	2.780"	32.0	2,367 fps	50,500 PSI	34.3	2,517 fps	58,400 PSI
	AR2208	.264"	2.780"	34.0	2,469 fps	53,300 PSI	36.0	2,578 fps	59,400 PSI
	AR2209	.264"	2.780"	39.0	2,530 fps	51,900 PSI	42.0	2,677 fps	58,800 PSI
	AR2213SC	.264"	2.780"	43.0	2,568 fps	53,000 PSI	45.7	2,686 fps	59,000 PSI
	AR2217	.264"	2.780"	48.0	2,619 fps	51,200 PSI	50.5	2,730 fps	57,000 PSI
142 GR.	AR2206	-	-	33.3	2,480 fps	52,000 PSI	35.4	2,590 fps	58,200 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

260 Remington				Case: Remington Twist: 1:9" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.025"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
142 GR. SIE HPBT	AR2206H	.264"	2.780"	34.0	2,486 fps	52,000 PSI	36.2	2,597 fps	58,200 PSI
	AR2208	.264"	2.780"	35.0	2,541 fps	54,000 PSI	37.5	2,645 fps	59,100 PSI
	AR2209	.264"	2.780"	41.5	2,590 fps	50,100 PSI	44.5	2,735 fps	58,000 PSI
	AR2213SC	.264"	2.780"	45.0	2,601 fps	50,900 PSI	48.0C	2,747 fps	58,700 PSI
160 GR. HDY RN	AR2209	.264"	2.860"	40.0	2,417 fps	52,100 PSI	43.0	2,538 fps	58,200 PSI
	AR2213SC	.264"	2.860"	43.0	2,419 fps	50,900 PSI	46.0	2,540 fps	58,100 PSI
	AR2217	.264"	2.860"	48.0	2,498 fps	50,500 PSI	50.0C	2,595 fps	56,400 PSI
6.5 x 55mm Swedish Mauser				Case: Winchester Twist: 1:7.87" Primer: Winchester LR			Barrel length: 24" Trim length: 2.155"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE HP	AR2206H	.264"	2.800"	40.0	3,031 fps	34,600 CUP	44.0	3,370 fps	45,100 CUP
	AR2208	.264"	2.800"	40.0	3,128 fps	36,600 CUP	44.0	3,350 fps	42,300 CUP
	AR2209	.264"	2.800"	47.0	2,909 fps	31,600 CUP	52.0C	3,283 fps	42,100 CUP
100 GR. SIE HP	AR2206H	.264"	2.850"	37.0	2,820 fps	38,800 CUP	41.0	3,033 fps	46,000 CUP
	AR2208	.264"	2.850"	38.0	2,892 fps	37,800 CUP	42.0	3,177 fps	45,800 CUP
	AR2209	.264"	2.850"	45.0	2,724 fps	31,400 CUP	50.0C	3,172 fps	46,000 CUP
	AR2213SC	.264"	2.850"	46.0	2,552 fps	27,800 CUP	51.0C	2,883 fps	37,500 CUP
107 GR. SIE HPBT	AR2206H	.264"	3.050"	37.0	2,777 fps	39,600 CUP	39.7	2,943 fps	45,900 CUP
	AR2208	.264"	3.050"	38.0	2,742 fps	39,800 CUP	42.0	2,952 fps	45,600 CUP
	AR2209	.264"	3.050"	43.0	2,706 fps	36,000 CUP	48.0C	3,035 fps	45,600 CUP
	AR2213SC	.264"	3.050"	46.0	2,590 fps	34,500 CUP	51.0C	2,911 fps	42,700 CUP
120 GR. NOS BT	AR2206H	.264"	3.000"	34.0	2,571 fps	43,000 CUP	37.8	2,715 fps	46,000 CUP
	AR2208	.264"	3.000"	35.0	2,579 fps	36,800 CUP	39.0	2,812 fps	45,300 CUP
	AR2209	.264"	3.000"	41.5	2,545 fps	36,800 CUP	46.0	2,792 fps	45,800 CUP
	AR2213SC	.264"	3.000"	44.5	2,528 fps	36,200 CUP	49.5C	2,802 fps	45,900 CUP
129 GR. HDY SP	AR2206H	.264"	2.935"	33.0	2,373 fps	38,200 CUP	36.3	2,561 fps	45,600 CUP
	AR2208	.264"	2.935"	34.0	2,472 fps	36,900 CUP	37.5	2,664 fps	46,000 CUP
	AR2209	.264"	2.935"	40.0	2,430 fps	35,100 CUP	45.5	2,703 fps	45,500 CUP
	AR2213SC	.264"	2.935"	44.0	2,449 fps	35,600 CUP	48.5C	2,689 fps	45,000 CUP
140 GR. SPR SP	AR2206H	.264"	3.030"	32.5	2,305 fps	38,100 CUP	35.8	2,493 fps	45,700 CUP
	AR2208	.264"	3.030"	32.5	2,312 fps	37,500 CUP	36.0	2,528 fps	46,000 CUP
	AR2209	.264"	3.030"	39.5	2,418 fps	38,600 CUP	44.0	2,617 fps	45,700 CUP
	AR2213SC	.264"	3.030"	42.5	2,382 fps	38,100 CUP	47.0	2,586 fps	45,700 CUP
	AR2217	.264"	3.030"	46.5	2,423 fps	37,600 CUP	51.5C	2,651 fps	46,000 CUP
142 GR. SIE HPBT	AR2206H	.264"	3.050"	32.5	2,311 fps	37,800 CUP	35.8	2,511 fps	45,800 CUP
	AR2208	.264"	3.050"	34.0	2,334 fps	38,100 CUP	38.0	2,559 fps	45,700 CUP
	AR2209	.264"	3.050"	39.0	2,427 fps	38,400 CUP	43.7	2,653 fps	45,800 CUP
	AR2213SC	.264"	3.050"	42.5	2,383 fps	37,300 CUP	47.0	2,604 fps	45,300 CUP
	AR2217	.264"	3.050"	48.0	2,453 fps	37,500 CUP	51.5C	2,601 fps	41,600 CUP
160 GR. HDY RN	AR2208	.264"	3.000"	32.5	2,173 fps	38,200 CUP	36.0	2,354 fps	45,600 CUP
	AR2209	.264"	3.000"	40.0	2,317 fps	38,800 CUP	43.0	2,445 fps	44,900 CUP
	AR2213SC	.264"	3.000"	44.0	2,327 fps	36,600 CUP	48.0C	2,524 fps	46,000 CUP

RIFLE DATA

6.5 x 55mm Swedish Mauser				Case: Winchester Twist: 1:7.87" Primer: Winchester LR			Barrel length: 24" Trim length: 2.155"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2217	.264"	3.000"	45.0	2,265 fps	35,000 CUP	50.0C	2,517 fps	45,300 CUP
6.5mm-06				Case: Winchester (reformed) Twist: 1:9" Primer: Federal 210M			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE HP	AR2206H	.264"	3.140"	43.0	3,245 fps	49,900 PSI	46.5	3,442 fps	60,600 PSI
	AR2208	.264"	3.140"	48.0	3,453 fps	58,400 PSI	52.0	3,588 fps	62,500 PSI
	AR2209	.264"	3.140"	53.0	3,336 fps	52,300 PSI	57.5	3,574 fps	62,300 PSI
95 GR. HDY V-MAX	AR2206H	.264"	3.200"	43.0	3,209 fps	55,400 PSI	46.0	3,359 fps	63,000 PSI
	AR2208	.264"	3.200"	44.0	3,167 fps	51,600 PSI	49.0	3,414 fps	63,100 PSI
	AR2209	.264"	3.200"	50.0	3,204 fps	52,100 PSI	54.5	3,436 fps	63,300 PSI
100 GR. NOS BT	AR2206H	.264"	3.200"	42.0	3,083 fps	56,400 PSI	44.0	3,205 fps	62,900 PSI
	AR2208	.264"	3.200"	43.0	3,070 fps	53,000 PSI	47.0	3,268 fps	63,300 PSI
	AR2209	.264"	3.200"	49.0	3,119 fps	53,800 PSI	53.0	3,315 fps	63,300 PSI
	AR2213SC	.264"	3.200"	53.0	3,085 fps	53,200 PSI	57.7	3,304 fps	63,400 PSI
107 GR. SIE HPBT	AR2208	.264"	3.300"	42.0	2,993 fps	52,700 PSI	45.8	3,185 fps	62,700 PSI
	AR2209	.264"	3.300"	47.0	3,022 fps	52,600 PSI	51.5	3,234 fps	62,700 PSI
	AR2213SC	.264"	3.300"	51.0	2,985 fps	51,800 PSI	55.5	3,200 fps	62,500 PSI
	AR2217	.264"	3.300"	56.0	2,945 fps	49,300 PSI	60.0C	3,141 fps	58,700 PSI
120 GR. SFT SP	AR2209	.264"	3.150"	45.0	2,823 fps	54,300 PSI	49.0	2,996 fps	63,300 PSI
	AR2213SC	.264"	3.150"	48.0	2,765 fps	51,400 PSI	52.5	2,970 fps	62,300 PSI
	AR2217	.264"	3.150"	55.0	2,837 fps	53,900 PSI	58.5C	2,986 fps	62,700 PSI
129 GR. HDY SP	AR2209	.264"	3.245"	43.0	2,676 fps	51,400 PSI	47.0	2,876 fps	62,500 PSI
	AR2213SC	.264"	3.245"	47.0	2,721 fps	54,100 PSI	51.0	2,889 fps	62,900 PSI
	AR2217	.264"	3.245"	51.0	2,683 fps	53,800 PSI	55.5C	2,885 fps	62,700 PSI
130 GR. NOS AB	AR2209	.264"	3.265"	42.1	2,615 fps	51,300 PSI	46.7	2,821 fps	61,500 PSI
	AR2213SC	.264"	3.265"	44.0	2,638 fps	54,700 PSI	48.8	2,824 fps	62,300 PSI
	AR2217	.264"	3.265"	47.7	2,670 fps	51,400 PSI	53.0	2,880 fps	61,600 PSI
140 GR. SPR GS-SP	AR2209	.264"	3.200"	42.0	2,558 fps	52,400 PSI	45.5	2,737 fps	62,700 PSI
	AR2213SC	.264"	3.200"	45.0	2,542 fps	52,300 PSI	49.5	2,731 fps	62,300 PSI
	AR2217	.264"	3.200"	49.0	2,570 fps	52,900 PSI	53.5C	2,761 fps	62,600 PSI
142 GR. SIE HPBT	AR2209	.264"	3.300"	42.0	2,572 fps	51,300 PSI	46.0	2,768 fps	62,900 PSI
	AR2213SC	.264"	3.300"	45.0	2,559 fps	50,000 PSI	50.3	2,795 fps	62,900 PSI
	AR2217	.264"	3.300"	49.0	2,555 fps	49,800 PSI	55.0C	2,816 fps	63,300 PSI
160 GR. HDY RN	AR2213SC	.264"	3.300"	46.0	2,461 fps	52,700 PSI	50.0	2,625 fps	62,600 PSI
	AR2217	.264"	3.300"	51.0	2,492 fps	53,600 PSI	55.0	2,650 fps	62,400 PSI

RIFLE DATA

6.5-284				Case: Winchester (reformed) Twist: 1:9" Primer: Federal 210			Barrel length: 24" Trim length: 2.160"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE HP	AR2206H	.264"	2.750"	43.0	3,210 fps	-	46.5	3,417 fps	-
	AR2208	.264"	2.750"	48.0	3,378 fps	-	52.0	3,587 fps	-
	AR2209	.264"	2.750"	53.0	3,260 fps	-	57.5	3,531 fps	-
95 GR. HDY V-MAX	AR2206H	.264"	2.820"	43.0	3,195 fps	-	46.0	3,318 fps	-
	AR2208	.264"	2.820"	44.0	3,165 fps	-	49.0	3,380 fps	-
	AR2209	.264"	2.820"	50.0	3,088 fps	-	54.5	3,349 fps	-
100 GR. NOS BT	AR2206H	.264"	2.800"	42.0	3,058 fps	-	44.0	3,143 fps	-
	AR2208	.264"	2.800"	43.0	3,083 fps	-	47.0	3,227 fps	-
	AR2209	.264"	2.800"	49.0	3,003 fps	-	53.0	3,242 fps	-
	AR2213SC	.264"	2.800"	53.0	2,969 fps	-	57.7	3,211 fps	-
107 GR. SIE HPBT	AR2208	.264"	2.920"	42.0	2,970 fps	-	45.8	3,125 fps	-
	AR2209	.264"	2.920"	47.0	2,898 fps	-	51.5	3,118 fps	-
	AR2213SC	.264"	2.920"	51.0	2,842 fps	-	55.5	3,084 fps	-
	AR2217	.264"	2.920"	56.0	2,808 fps	-	60.0C	2,985 fps	-
120 GR. SFT SP	AR2209	.264"	2.780"	45.0	2,744 fps	-	49.0	2,897 fps	-
	AR2213SC	.264"	2.780"	48.0	2,651 fps	-	52.5	2,871 fps	-
	AR2217	.264"	2.780"	55.0	2,743 fps	-	58.5C	2,901 fps	-
129 GR. HDY SP	AR2209	.264"	2.935"	43.0	2,670 fps	-	47.0	2,863 fps	-
	AR2213SC	.264"	2.935"	47.0	2,670 fps	-	51.0	2,859 fps	-
	AR2217	.264"	2.935"	51.0	2,638 fps	-	55.5C	2,820 fps	-
130 GR. NOS AB	AR2209	.264"	2.950"	42.1	2,645 fps	-	46.7	2,874 fps	-
	AR2213SC	.264"	2.950"	44.0	2,541 fps	-	48.8	2,779 fps	-
	AR2217	.264"	2.950"	47.7	2,570 fps	-	53.0	2,812 fps	-
140 GR. SPR GS-SP	AR2209	.264"	2.910"	42.0	2,548 fps	-	45.5	2,720 fps	-
	AR2213SC	.264"	2.910"	45.0	2,520 fps	-	49.5	2,722 fps	-
	AR2217	.264"	2.910"	49.0	2,503 fps	-	53.5C	2,694 fps	-
142 GR. SIE HPBT	AR2209	.264"	2.900"	42.0	2,583 fps	-	46.0	2,735 fps	-
	AR2213SC	.264"	2.900"	45.0	2,479 fps	-	50.3	2,714 fps	-
	AR2217	.264"	2.900"	49.0	2,436 fps	-	55.0C	2,700 fps	-
160 GR. HDY RN	AR2213SC	.264"	2.980"	46.0	2,433 fps	-	50.0	2,582 fps	-
	AR2217	.264"	2.980"	51.0	2,454 fps	-	55.0	2,622 fps	-
6.5mm Remington Magnum				Case: Remington Twist: 1:9" Primer: Remington 9 1/2M			Barrel length: 26" Trim length: 2.160"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE HP	AR2206H	.264"	2.800"	47.0	3,322 fps	39,000 CUP	51.0	3,613 fps	49,600 CUP
	AR2209	.264"	2.800"	54.0	3,220 fps	43,000 CUP	57.0	3,564 fps	50,700 CUP
	AR2213SC	.264"	2.800"	56.0	3,201 fps	34,800 CUP	61.0	3,570 fps	46,700 CUP
100 GR. HDY SP	AR2206H	.264"	2.940"	46.0	3,186 fps	42,600 CUP	50.0	3,475 fps	52,200 CUP
	AR2209	.264"	2.940"	51.0	3,071 fps	44,000 CUP	55.0	3,327 fps	51,700 CUP
	AR2213SC	.264"	2.940"	55.0	3,071 fps	37,200 CUP	60.0	3,416 fps	48,100 CUP
120 GR. SPR SP	AR2206H	.264"	2.790"	42.5	2,872 fps	42,000 CUP	46.0	3,081 fps	50,900 CUP
	AR2209	.264"	2.790"	49.0	2,780 fps	43,700 CUP	52.0	3,080 fps	51,200 CUP
	AR2213SC	.264"	2.790"	54.0	2,985 fps	42,600 CUP	59.0	3,286 fps	51,000 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

6.5mm Remington Magnum				Case: Remington Twist: 1:9" Primer: Remington 9 1/2M			Barrel length: 26" Trim length: 2.160"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
129 GR. HDY SP	AR2206H	.264"	3.040"	40.5	2,709 fps	39,600 CUP	44.0	2,936 fps	49,900 CUP
	AR2209	.264"	3.040"	47.0	2,709 fps	41,400 CUP	51.0	2,994 fps	50,700 CUP
	AR2213SC	.264"	3.040"	53.5	2,854 fps	40,200 CUP	58.0	3,155 fps	50,800 CUP
140 GR. NOS PART	AR2206H	.264"	2.790"	38.5	2,569 fps	43,800 CUP	42.0	2,752 fps	49,200 CUP
	AR2209	.264"	2.790"	45.0	2,514 fps	42,000 CUP	49.0	2,780 fps	51,200 CUP
	AR2213SC	.264"	2.790"	49.5	2,708 fps	44,400 CUP	54.0	2,943 fps	51,400 CUP
264 Winchester Magnum				Case: Winchester Twist: 1:8" Primer: Winchester LR			Barrel length: 26" Trim length: 2.490"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE HP	AR2206H	.264"	3.100"	50.5	3,264 fps	44,600 CUP	55.0	3,625 fps	52,900 CUP
	AR2209	.264"	3.100"	59.0	3,396 fps	43,600 CUP	61.0	3,669 fps	52,400 CUP
	AR2213SC	.264"	3.100"	67.0	3,304 fps	39,000 CUP	73.0	3,812 fps	54,100 CUP
	AR2217	.264"	3.100"	74.0	3,270 fps	37,600 CUP	78.0	3,480 fps	48,000 CUP
100 GR. HDY SP	AR2206H	.264"	3.230"	49.0	2,970 fps	44,100 CUP	53.0	3,405 fps	54,200 CUP
	AR2209	.264"	3.230"	56.0	3,194 fps	44,100 CUP	59.0	3,570 fps	52,600 CUP
	AR2213SC	.264"	3.230"	65.5	3,239 fps	45,900 CUP	71.0	3,680 fps	53,900 CUP
	AR2217	.264"	3.230"	72.0	3,164 fps	42,500 CUP	77.0	3,428 fps	47,500 CUP
120 GR. SPR SP	AR2209	.264"	3.250"	54.5	3,045 fps	53,000 PSI	58.0	3,185 fps	61.2 PSI
	AR2213SC	.264"	3.250"	60.6	3,027 fps	49,100 PSI	64.5	3,254 fps	62,000 PSI
	AR2217	.264"	3.250"	65.5	3,050 fps	49,100 PSI	69.7	3,267 fps	62,100 PSI
	AR2225	.264"	3.250"	66.3	3,091 fps	50,400 PSI	70.5	3,299 fps	61,700 PSI
129 GR. HDY SP	AR2209	.264"	3.250"	53.6	2,929 fps	53,500 PSI	57.0	3,067 fps	60,900 PSI
	AR2213SC	.264"	3.250"	58.3	2,927 fps	52,500 PSI	62.0	3,101 fps	61,400 PSI
	AR2217	.264"	3.250"	60.2	2,942 fps	54,500 PSI	64.0	3,064 fps	60,700 PSI
	AR2225	.264"	3.250"	63.5	3,005 fps	51,900 PSI	67.5	3,171 fps	61,500 PSI
140 GR. NOS PART	AR2209	.264"	3.260"	48.9	2,713 fps	55,300 PSI	52.0	2,829 fps	60,800 PSI
	AR2213SC	.264"	3.260"	51.7	2,753 fps	55,600 PSI	55.0	2,853 fps	59,400 PSI
	AR2217	.264"	3.260"	55.0	2,810 fps	58,600 PSI	58.5	2,900 fps	61,800 PSI
	AR2225	.264"	3.260"	59.7	2,904 fps	57,000 PSI	63.5	3,026 fps	63,000 PSI
160 GR. HDY RN	AR2209	.264"	3.350"	53.4	2,675 fps	56,600 PSI	56.8	2,784 fps	61,500 PSI
	AR2213SC	.264"	3.350"	58.1	2,725 fps	54,800 PSI	61.8	2,847 fps	61,500 PSI
	AR2217	.264"	3.350"	61.5	2,730 fps	55,500 PSI	65.4	2,857 fps	62,200 PSI
	AR2225	.264"	3.350"	60.2	2,703 fps	54,800 PSI	64.0	2,846 fps	61 PSI

RIFLE DATA

6.5 x 68mm RWS (Schuler)				Case:			Barrel length: 25"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR.	AR2209	-	-	-	-	-	65.0	3,700 fps	-
	AR2213SC	-	-	-	-	-	73.0	3,705 fps	-
100 GR.	AR2213SC	-	-	-	-	-	71.0	3,550 fps	-
120 GR.	AR2213SC	-	-	-	-	-	68.0	3,310 fps	-
140 GR.	AR2213SC	-	-	-	-	-	63.0	2,995 fps	-
				Case: Remington			Barrel length: 24"		
6.8mm Remington SPC				Twist: 1:10"			Trim length: 1.676"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. BAR TAC-X FB	AR2207	.277"	2.230"	25.2	2,829 fps	40,400 PSI	27.4	3,030 fps	50,900 PSI
	AR2219	.277"	2.230"	28.0	2,637 fps	33,600 PSI	31.0C	2,949 fps	45,600 PSI
	Bench Mark 2	.277"	2.230"	27.9	2,595 fps	31,800 PSI	31.0C	2,848 fps	40,000 PSI
90 GR. SPR HP	AR2207	.277"	2.255"	26.0	2,810 fps	47,700 PSI	28.6C	3,012 fps	54,000 PSI
	AR2219	.277"	2.255"	29.0	2,765 fps	42,100 PSI	31.0C	2,929 fps	49,500 PSI
	Bench Mark 2	.277"	2.255"	29.0	2,705 fps	38,900 PSI	31.0C	2,853 fps	45,900 PSI
100 GR. BAR X	AR2207	.277"	2.260"	24.0	2,542 fps	40,500 PSI	26.5	2,791 fps	52,900 PSI
	AR2219	.277"	2.260"	27.0	2,502 fps	37,700 PSI	30.0C	2,803 fps	52,300 PSI
	Bench Mark 2	.277"	2.260"	28.0	2,588 fps	42,000 PSI	30.0C	2,755 fps	51,200 PSI
110 GR. HDY V-MAX	AR2207	.277"	2.260"	23.0	2,431 fps	40,600 PSI	25.3C	2,651 fps	52,000 PSI
	AR2219	.277"	2.260"	27.0	2,571 fps	47,600 PSI	29.0C	2,697 fps	53,600 PSI
	Bench Mark 2	.277"	2.260"	27.0	2,518 fps	44,000 PSI	28.8C	2,665 fps	52,000 PSI
	Bench Mark 8208	.277"	2.260"	28.0	2,496 fps	38,500 PSI	30.0C	2,690 fps	48,600 PSI
	AR2206H	.277"	2.260"	27.0	2,335 fps	33,900 PSI	29.0C	2,550 fps	42,400 PSI
115 GR. SIE HPBT	AR2207	.277"	2.260"	22.0	2,413 fps	47,800 PSI	24.0C	2,534 fps	52,300 PSI
	AR2219	.277"	2.260"	26.0	2,421 fps	43,500 PSI	28.2C	2,608 fps	53,300 PSI
	Bench Mark 2	.277"	2.260"	26.0	2,400 fps	42,400 PSI	28.5C	2,581 fps	51,800 PSI
	Bench Mark 8208	.277"	2.260"	28.0	2,483 fps	41,800 PSI	30.0C	2,647 fps	51,400 PSI
	AR2206H	.277"	2.260"	27.0	2,302 fps	34,300 PSI	29.0C	2,495 fps	42,800 PSI
				Case:			Barrel length: 24"		
270/303				Twist: -			Trim length: -		
				Primer:					
WARNING: For SMLE Actions, reduce these loads by at least two grains.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR.	AR2206	-	-	-	-	-	35.0	2,750 fps	-
	AR2208	-	-	-	-	-	39.0	2,750 fps	-
	AR2209	-	-	-	-	-	44.0	2,750 fps	-
130 GR.	AR2206	-	-	-	-	-	33.0	2,500 fps	-
	AR2208	-	-	-	-	-	36.5	2,500 fps	-
	AR2209	-	-	-	-	-	42.5	2,500 fps	-
150 GR.	AR2208	-	-	-	-	-	33.5	2,350 fps	-
	AR2209	-	-	-	-	-	40.0	2,350 fps	-

RIFLE DATA

270 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.530"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SIE HP	Bench Mark 8208	.277"	3.200"	45.6	3,380 fps	57,900 PSI	48.0	3,476 fps	61,900 PSI
	AR2206H	.277"	3.200"	50.0	3,482 fps	48,100 CUP	53.0	3,595 fps	50,400 CUP
	AR2208	.277"	3.200"	51.0	3,409 fps	46,000 CUP	55.0	3,596 fps	51,400 CUP
	AR2209	.277"	3.200"	58.0	3,401 fps	43,700 CUP	62.0C	3,603 fps	49,800 CUP
100 GR. SPR SP	AR2206H	.277"	3.145"	47.0	3,298 fps	47,000 CUP	50.0	3,401 fps	50,200 CUP
	AR2208	.277"	3.145"	48.0	3,232 fps	44,400 CUP	52.0	3,397 fps	50,200 CUP
	AR2209	.277"	3.145"	56.0	3,258 fps	44,000 CUP	59.4	3,401 fps	50,200 CUP
110 GR. HDY HP	Bench Mark 8208	.277"	3.250"	44.1	3,064 fps	56,400 PSI	46.4	3,146 fps	59,500 PSI
	AR2206H	.277"	3.250"	45.0	3,113 fps	46,700 CUP	47.5	3,215 fps	50,800 CUP
	AR2208	.277"	3.250"	43.0	3,072 fps	44,100 CUP	48.7	3,248 fps	50,800 CUP
	AR2209	.277"	3.250"	54.0	3,164 fps	46,900 CUP	57.0	3,267 fps	50,100 CUP
	AR2213SC	.277"	3.250"	58.0	3,057 fps	42,600 CUP	62.0C	3,214 fps	48,200 CUP
120 GR. BAR XFB	AR2206H	.277"	3.270"	42.0	2,799 fps	45,000 CUP	45.0	2,950 fps	50,400 CUP
	AR2208	.277"	3.270"	44.0	2,858 fps	46,300 CUP	47.0	3,010 fps	51,000 CUP
	AR2209	.277"	3.270"	51.0	2,886 fps	44,700 CUP	55.0	3,069 fps	51,200 CUP
	AR2213SC	.277"	3.270"	58.0	2,918 fps	45,800 CUP	62.0C	3,112 fps	51,200 CUP
130 GR. BAR TSX	Bench Mark 8208	.277"	3.230"	42.3	2,798 fps	55,700 PSI	45.0	2,922 fps	62,400 PSI
	AR2208	.277"	3.230"	44.0	2,849 fps	54,800 PSI	48.0	3,013 fps	63,200 PSI
	AR2209	.277"	3.230"	51.0	2,905 fps	52,500 PSI	55.5	3,111 fps	63,500 PSI
	AR2213SC	.277"	3.230"	54.0	2,747 fps	45,500 PSI	60.0C	3,025 fps	59,000 PSI
	AR2217	.277"	3.230"	57.0	2,716 fps	42,100 PSI	60.0C	2,846 fps	48,200 PSI
130 GR. HDY SP	Trail Boss	.277"	3.180"	14.0	1,318 fps	22,800 PSI	19.7	1,537 fps	27,100 PSI
	Bench Mark 8208	.277"	3.180"	42.8	2,840 fps	57,600 PSI	45.0	2,934 fps	62,800 PSI
	AR2206H	.277"	3.180"	42.0	2,782 fps	44,700 CUP	45.0	2,922 fps	51,000 CUP
	AR2208	.277"	3.180"	43.0	2,797 fps	43,900 CUP	46.0	2,931 fps	49,600 CUP
	AR2209	.277"	3.180"	51.0	2,865 fps	45,200 CUP	54.3	3,012 fps	50,500 CUP
	AR2213SC	.277"	3.180"	56.0	2,843 fps	44,400 CUP	60.0C	3,019 fps	51,000 CUP
	AR2217	.277"	3.180"	61.0	2,900 fps	42,900 CUP	64.0C	3,025 fps	48,100 CUP
135 GR. SIE BT	AR2206H	.277"	3.340"	41.0	2,735 fps	44,300 CUP	44.0	2,879 fps	50,600 CUP
	AR2208	.277"	3.340"	41.0	2,701 fps	40,800 CUP	45.0	2,902 fps	50,200 CUP
	AR2209	.277"	3.340"	50.0	2,834 fps	44,400 CUP	53.5	2,994 fps	50,700 CUP
	AR2213SC	.277"	3.340"	55.0	2,812 fps	43,600 CUP	59.5C	3,010 fps	51,000 CUP
	AR2217	.277"	3.340"	61.0	2,915 fps	43,100 CUP	63.0C	3,011 fps	47,600 CUP
140 GR. SFT SP	AR2206H	.277"	3.280"	40.0	2,627 fps	45,300 CUP	42.6	2,768 fps	50,600 CUP
	AR2208	.277"	3.280"	41.0	2,623 fps	44,300 CUP	43.7	2,772 fps	50,500 CUP
	AR2209	.277"	3.280"	49.0	2,737 fps	44,500 CUP	52.0	2,870 fps	50,400 CUP
	AR2213SC	.277"	3.280"	54.0	2,716 fps	43,900 CUP	58.0C	2,888 fps	50,100 CUP
	AR2217	.277"	3.280"	59.0	2,771 fps	41,800 CUP	63.0C	2,979 fps	50,800 CUP
150 GR. HDY SP	AR2209	.277"	3.285"	46.0	2,575 fps	43,400 CUP	49.0	2,724 fps	51,000 CUP
	AR2213SC	.277"	3.285"	52.0	2,651 fps	46,300 CUP	55.7	2,804 fps	51,200 CUP
	AR2217	.277"	3.285"	55.0	2,689 fps	44,900 CUP	59.0C	2,831 fps	51,000 CUP
160 GR. NOS PART	AR2209	.277"	3.340"	46.0	2,501 fps	43,600 CUP	49.0	2,646 fps	51,100 CUP
	AR2213SC	.277"	3.340"	50.0	2,510 fps	43,000 CUP	54.0	2,673 fps	50,500 CUP
	AR2217	.277"	3.340"	55.0	2,614 fps	44,200 CUP	59.0C	2,765 fps	50,900 CUP
180 GR. BAR JRN	AR2213SC	.277"	3.300"	47.0	2,358 fps	46,000 CUP	50.5	2,501 fps	51,100 CUP

RIFLE DATA

270 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.530"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2217	.277"	3.300"	50.0	2,404 fps	45,100 CUP	54.0	2,540 fps	50,600 CUP
270 Winchester Short Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.090"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SIE HP	AR2206H	.277"	2.700"	53.0	3,508 fps	52,900 PSI	56.5	3,690 fps	62,500 PSI
	AR2208	.277"	2.700"	57.0	3,610 fps	57,600 PSI	60.5	3,734 fps	62,800 PSI
	AR2209	.277"	2.700"	64.0	3,568 fps	55,000 PSI	67.5	3,733 fps	62,800 PSI
	AR2213SC	.277"	2.700"	69.0	3,525 fps	54,900 PSI	73.0C	3,703 fps	63,400 PSI
100 GR. SPR HP	AR2206H	.277"	2.700"	51.0	3,338 fps	53,200 PSI	54.5	3,505 fps	62,500 PSI
	AR2208	.277"	2.700"	55.0	3,416 fps	55,700 PSI	58.5	3,573 fps	63,300 PSI
	AR2209	.277"	2.700"	62.0	3,458 fps	55,000 PSI	65.5	3,585 fps	62,900 PSI
	AR2213SC	.277"	2.700"	67.0	3,352 fps	52,900 PSI	71.0C	3,542 fps	62,700 PSI
110 GR. HDY HP	AR2208	.277"	2.800"	53.0	3,276 fps	57,000 PSI	56.0	3,406 fps	63,200 PSI
	AR2209	.277"	2.800"	59.0	3,287 fps	55,900 PSI	63.0	3,436 fps	63,200 PSI
	AR2213SC	.277"	2.800"	64.0	3,265 fps	56,300 PSI	67.5	3,404 fps	63,000 PSI
	AR2217	.277"	2.800"	71.0	3,279 fps	55,400 PSI	73.0C	3,360 fps	60,400 PSI
130 GR. BAR TSX	AR2208	.277"	2.800"	48.0	2,900 fps	51,600 PSI	52.5	3,106 fps	62,500 PSI
	AR2209	.277"	2.800"	57.0	3,041 fps	55,700 PSI	61.5	3,191 fps	62,900 PSI
	AR2213SC	.277"	2.800"	63.0	3,002 fps	53,200 PSI	67.0C	3,160 fps	60,700 PSI
	AR2217	.277"	2.800"	69.0	3,066 fps	55,100 PSI	73.0C	3,196 fps	61,100 PSI
130 GR. HDY SP	Trail Boss	.277"	2.730"	16.0	1,516 fps	38,100 PSI	22.5	1,832 fps	47,900 PSI
	AR2208	.277"	2.730"	51.0	3,040 fps	56,400 PSI	54.0	3,169 fps	63,200 PSI
	AR2209	.277"	2.730"	57.0	3,093 fps	56,600 PSI	60.5	3,226 fps	63,500 PSI
	AR2213SC	.277"	2.730"	63.0	3,085 fps	56,300 PSI	67.0	3,228 fps	63,400 PSI
	AR2217	.277"	2.730"	71.0	3,100 fps	55,400 PSI	73.0C	3,168 fps	58,700 PSI
135 GR. SIE HPBT	AR2208	.277"	2.840"	51.0	3,000 fps	54,800 PSI	54.0	3,134 fps	63,000 PSI
	AR2209	.277"	2.840"	58.0	3,093 fps	57,000 PSI	61.5	3,211 fps	63,100 PSI
	AR2213SC	.277"	2.840"	62.0	3,056 fps	55,400 PSI	65.5	3,192 fps	62,900 PSI
	AR2217	.277"	2.840"	69.0	3,056 fps	54,400 PSI	73.0C	3,205 fps	62,600 PSI
140 GR. SFT SP	AR2209	.277"	2.800"	54.0	2,928 fps	54,500 PSI	58.0	3,087 fps	63,100 PSI
	AR2213SC	.277"	2.800"	59.0	2,974 fps	57,000 PSI	62.5	3,085 fps	63,000 PSI
	AR2217	.277"	2.800"	66.0	2,984 fps	55,700 PSI	70.0C	3,137 fps	63,500 PSI
	AR2225	.277"	2.800"	68.0	3,016 fps	53,200 PSI	71.0C	3,165 fps	61,300 PSI
150 GR. HDY SP	AR2209	.277"	2.740"	53.0	2,846 fps	55,600 PSI	56.5	2,978 fps	63,000 PSI
	AR2213SC	.277"	2.740"	56.0	2,804 fps	54,500 PSI	60.0	2,962 fps	63,100 PSI
	AR2217	.277"	2.740"	64.0	2,864 fps	54,600 PSI	67.5C	3,001 fps	62,800 PSI
	AR2225	.277"	2.740"	66.0	2,908 fps	53,300 PSI	70.0C	3,071 fps	63,000 PSI
160 GR. NOS PART	AR2209	.277"	2.830"	52.0	2,735 fps	56,100 PSI	55.0	2,834 fps	62,600 PSI
	AR2213SC	.277"	2.830"	57.0	2,784 fps	58,400 PSI	60.0	2,877 fps	63,300 PSI
	AR2217	.277"	2.830"	63.0	2,802 fps	57,400 PSI	66.5	2,913 fps	63,200 PSI
	AR2225	.277"	2.830"	65.0	2,826 fps	53,400 PSI	68.5	2,989 fps	62,600 PSI

RIFLE DATA

270 Weatherby Magnum				Case: Weatherby Twist: 1:12" Primer: CCI 250			Barrel length: 26" Trim length: 2.539"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. SIE HP	AR2206H	.277"	3.150"	63.0	3,388 fps	-	67.0	3,647 fps	-
	AR2209	.277"	3.150"	66.0	3,317 fps	-	70.0	3,631 fps	-
	AR2213SC	.277"	3.150"	72.0	3,386 fps	-	78.0	3,631 fps	-
	AR2217	.277"	3.150"	78.0	3,183 fps	-	81.0	3,269 fps	-
100 GR. SPR SP	AR2206H	.277"	3.250"	63.0	3,377 fps	-	66.0	3,597 fps	-
	AR2209	.277"	3.250"	65.0	3,282 fps	-	69.0	3,509 fps	-
	AR2213SC	.277"	3.250"	74.0	3,482 fps	-	77.0	3,666 fps	-
	AR2217	.277"	3.250"	77.0	3,062 fps	-	81.0	3,287 fps	-
110 GR. HDY HP	AR2209	.277"	3.290"	64.0	3,214 fps	-	68.0	3,477 fps	-
	AR2213SC	.277"	3.290"	73.0	3,397 fps	-	76.0	3,482 fps	-
	AR2217	.277"	3.290"	76.0	3,045 fps	-	81.0	3,242 fps	-
130 GR. SPR SP	AR2209	.277"	3.250"	62.0	3,110 fps	-	66.0	3,262 fps	-
	AR2213SC	.277"	3.250"	67.0	3,087 fps	-	70.0	3,205 fps	-
	AR2217	.277"	3.250"	76.0	2,941 fps	-	81.0	3,259 fps	-
140 GR. HDY BTSP	AR2209	.277"	3.280"	60.0	2,926 fps	-	64.0	3,140 fps	-
	AR2213SC	.277"	3.280"	65.0	2,904 fps	-	68.0	3,112 fps	-
	AR2217	.277"	3.280"	75.0	2,849 fps	-	80.0	3,145 fps	-
150 GR. NOS PART	AR2209	.277"	3.250"	60.0	2,846 fps	-	63.0	2,986 fps	-
	AR2213SC	.277"	3.250"	65.0	2,872 fps	-	68.0	3,057 fps	-
	AR2217	.277"	3.250"	75.0	2,902 fps	-	79.0	3,132 fps	-
160 GR. NOS PART	AR2209	.277"	3.250"	58.0	2,666 fps	-	61.0	2,738 fps	-
	AR2213SC	.277"	3.250"	62.0	2,674 fps	-	65.0	2,901 fps	-
	AR2217	.277"	3.250"	74.0	2,872 fps	-	78.0	3,051 fps	-
7mm BR Remington				Case: Remington Twist: 1:9.5" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.515"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. BAR XFB	AR2207	.284"	2.125"	26.0	2,524 fps	36,600 CUP	28.5	2,743 fps	49,900 CUP
	AR2219	.284"	2.125"	29.0	2,516 fps	37,700 CUP	31.5C	2,738 fps	49,800 CUP
	Bench Mark 2	.284"	2.125"	29.0	2,439 fps	38,800 CUP	32.0C	2,719 fps	50,100 CUP
	AR2206H	.284"	2.125"	31.0	2,582 fps	40,900 CUP	33.0C	2,706 fps	45,300 CUP
115 GR. SPR HP	AR2207	.284"	2.150"	26.0	2,498 fps	41,500 CUP	28.5	2,685 fps	50,500 CUP
	AR2219	.284"	2.150"	29.0	2,476 fps	37,200 CUP	31.5C	2,693 fps	49,800 CUP
	Bench Mark 2	.284"	2.150"	30.0	2,524 fps	41,600 CUP	32.0C	2,674 fps	49,800 CUP
	Bench Mark 8208	.284"	2.150"	30.0	2,455 fps	34,400 CUP	33.0C	2,737 fps	45,300 CUP
	AR2206H	.284"	2.150"	31.0	2,497 fps	38,900 CUP	33.0C	2,644 fps	45,300 CUP
120 GR. HDY V-MAX	AR2207	.284"	2.300"	25.5	2,399 fps	40,200 CUP	27.5	2,597 fps	49,500 CUP
	AR2219	.284"	2.300"	28.0	2,430 fps	39,800 CUP	30.8	2,636 fps	50,400 CUP
	Bench Mark 2	.284"	2.300"	29.0	2,457 fps	43,100 CUP	31.0	2,590 fps	49,900 CUP
	Bench Mark 8208	.284"	2.300"	30.0	2,479 fps	36,400 CUP	33.0C	2,726 fps	49,200 CUP
	AR2206H	.284"	2.300"	30.0	2,437 fps	39,600 CUP	32.7C	2,650 fps	49,800 CUP
130 GR. SIE HPBT	AR2207	.284"	2.250"	25.0	2,347 fps	40,000 CUP	27.0	2,514 fps	50,500 CUP
	AR2219	.284"	2.250"	28.0	2,376 fps	40,500 CUP	30.0C	2,543 fps	50,600 CUP
	Bench Mark 2	.284"	2.250"	28.0	2,361 fps	40,700 CUP	30.2C	2,517 fps	50,000 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

7mm BR Remington				Case: Remington Twist: 1:9.5" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.515"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	Bench Mark 8208	.284"	2.250"	29.0	2,379 fps	37,500 CUP	32.0C	2,625 fps	50,400 CUP
	AR2206H	.284"	2.250"	30.0	2,431 fps	43,900 CUP	32.0C	2,560 fps	49,200 CUP
139 GR. HDY SST	AR2207	.284"	2.260"	24.0	2,275 fps	42,500 CUP	26.0	2,390 fps	49,800 CUP
	AR2219	.284"	2.260"	26.5	2,265 fps	40,100 CUP	28.5C	2,426 fps	49,700 CUP
	Bench Mark 2	.284"	2.260"	27.5	2,278 fps	41,200 CUP	29.7C	2,420 fps	49,900 CUP
	Bench Mark 8208	.284"	2.250"	29.0	2,359 fps	41,300 CUP	31.0C	2,510 fps	46,700 CUP
	AR2206H	.284"	2.260"	29.0	2,320 fps	41,200 CUP	31.0C	2,448 fps	47,000 CUP
145 GR. SPR SPBT	AR2219	.284"	2.200"	27.0	2,220 fps	37,400 CUP	28.5C	2,349 fps	47,500 CUP
	Bench Mark 2	.284"	2.200"	27.5	2,270 fps	40,400 CUP	29.7C	2,432 fps	50,400 CUP
	Bench Mark 8208	.284"	2.200"	28.5	2,290 fps	38,500 CUP	31.0C	2,492 fps	47,000 CUP
	AR2206H	.284"	2.200"	29.0	2,320 fps	42,400 CUP	31.0C	2,453 fps	47,500 CUP
150 GR. NOS BT	AR2219	.284"	2.340"	26.5	2,215 fps	40,400 CUP	28.5C	2,366 fps	49,600 CUP
	Bench Mark 2	.284"	2.340"	27.0	2,232 fps	41,900 CUP	29.5C	2,385 fps	50,200 CUP
	Bench Mark 8208	.284"	2.340"	28.5	2,289 fps	39,600 CUP	31.0C	2,475 fps	50,200 CUP
	AR2206H	.284"	2.340"	28.5	2,247 fps	39,600 CUP	30.5C	2,385 fps	48,300 CUP
162 GR. HDY A-MAX	AR2219	.284"	2.400"	26.0	2,132 fps	39,800 CUP	28.3	2,292 fps	49,800 CUP
	Bench Mark 2	.284"	2.400"	27.0	2,144 fps	41,200 CUP	29.0C	2,285 fps	49,500 CUP
	Bench Mark 8208	.284"	2.400"	28.0	2,209 fps	40,600 CUP	30.5C	2,387 fps	48,600 CUP
	AR2206H	.284"	2.400"	27.5	2,132 fps	37,500 CUP	29.5C	2,296 fps	49,600 CUP
168 GR. SIE HPBT	AR2219	.284"	2.320"	26.0	2,112 fps	40,300 CUP	28.0	2,247 fps	49,600 CUP
	Bench Mark 2	.284"	2.320"	26.5	2,118 fps	41,400 CUP	28.5	2,246 fps	49,700 CUP
	Bench Mark 8208	.284"	2.320"	28.0	2,165 fps	41,300 CUP	30.5C	2,354 fps	49,800 CUP
	AR2206H	.284"	2.320"	28.0	2,154 fps	42,300 CUP	30.0C	2,287 fps	49,200 CUP
7-30 Waters				Case: Federal Twist: 1:9.5" Primer: Federal 210			Barrel length: 24" Trim length: 2.030"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY HP	AR2219	.284"	2.700"	27.0	2,447 fps	30,500 CUP	30.0	2,679 fps	40,200 CUP
	Bench Mark 2	.284"	2.700"	27.0	2,407 fps	29,600 CUP	30.5	2,646 fps	39,300 CUP
	AR2206H	.284"	2.700"	34.0	2,707 fps	33,500 CUP	37.0C	2,908 fps	39,200 CUP
	AR2208	.284"	2.700"	35.0	2,660 fps	31,400 CUP	38.0C	2,814 fps	35,000 CUP
120 GR. NOS FP	AR2219	.284"	2.550"	26.0	2,274 fps	29,500 CUP	29.0	2,497 fps	40,200 CUP
	Bench Mark 2	.284"	2.550"	26.5	2,267 fps	31,500 CUP	29.5	2,474 fps	40,200 CUP
	AR2206H	.284"	2.550"	31.0	2,413 fps	33,200 CUP	34.5	2,654 fps	39,400 CUP
	AR2208	.284"	2.550"	34.0	2,480 fps	31,100 CUP	37.0C	2,653 fps	40,000 CUP
130 GR. SIE HPBT	AR2219	.284"	2.720"	25.0	2,142 fps	31,600 CUP	27.3	2,320 fps	39,300 CUP
	Bench Mark 2	.284"	2.720"	25.0	2,078 fps	28,900 CUP	28.0	2,314 fps	40,100 CUP
	AR2206H	.284"	2.720"	31.0	2,360 fps	31,000 CUP	33.4C	2,528 fps	39,500 CUP
	AR2208	.284"	2.720"	32.0	2,336 fps	30,600 CUP	35.6C	2,561 fps	40,100 CUP
139 GR. HDY FP	AR2219	.284"	2.550"	24.0	1,981 fps	28,500 CUP	27.0	2,217 fps	39,400 CUP
	Bench Mark 2	.284"	2.550"	25.0	2,048 fps	31,000 CUP	28.0	2,220 fps	39,600 CUP
	AR2206H	.284"	2.550"	30.0	2,250 fps	32,900 CUP	33.0	2,435 fps	39,800 CUP
	AR2208	.284"	2.550"	32.0	2,251 fps	30,900 CUP	35.5C	2,472 fps	39,100 CUP
145 GR. SPR SP	Bench Mark 2	.284"	2.720"	25.0	2,037 fps	30,200 CUP	28.0	2,235 fps	40,100 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

7-30 Waters				Case: Federal			Barrel length: 24"		
				Twist: 1:9.5"			Trim length: 2.030"		
				Primer: Federal 210					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.284"	2.720"	29.0	2,238 fps	35,100 CUP	32.0	2,369 fps	39,900 CUP
	AR2208	.284"	2.720"	31.0	2,217 fps	33,600 CUP	34.2	2,439 fps	39,700 CUP
150 GR. NOS BT	Bench Mark 2	.284"	2.780"	23.0	1,929 fps	30,400 CUP	26.0	2,144 fps	39,200 CUP
	AR2206H	.284"	2.780"	29.0	2,192 fps	33,300 CUP	32.0C	2,347 fps	39,600 CUP
	AR2208	.284"	2.780"	31.0	2,215 fps	32,900 CUP	34.2C	2,388 fps	40,000 CUP
168 GR. SIE HPBT	Bench Mark 2	.284"	2.780"	23.0	1,897 fps	31,600 CUP	25.5	2,055 fps	39,800 CUP
	AR2206H	.284"	2.780"	28.0	2,132 fps	34,400 CUP	30.2	2,222 fps	38,600 CUP
	AR2208	.284"	2.780"	29.0	2,089 fps	33,000 CUP	32.0C	2,229 fps	39,200 CUP
7mm-08 Remington				Case: Remington			Barrel length: 24"		
				Twist: 1:9.5"			Trim length: 2.025"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. BAR XFB	AR2219	.284"	2.650"	37.5	2,917 fps	40,300 CUP	40.0	3,105 fps	49,000 CUP
	Bench Mark 2	.284"	2.650"	40.0	2,968 fps	41,400 CUP	42.5	3,144 fps	49,600 CUP
	AR2206H	.284"	2.650"	41.0	3,037 fps	41,000 CUP	45.0	3,286 fps	49,900 CUP
	AR2208	.284"	2.650"	42.0	3,060 fps	40,800 CUP	45.7	3,277 fps	49,600 CUP
115 GR. SPR HP	AR2219	.284"	2.655"	39.0	2,951 fps	44,800 CUP	41.0	3,053 fps	49,800 CUP
	Bench Mark 2	.284"	2.655"	40.0	2,887 fps	42,000 CUP	43.5	3,103 fps	50,500 CUP
	Bench Mark 8208	.284"	2.655"	40.6	2,866 fps	40,100 CUP	43.2	3,022 fps	48,400 CUP
	AR2206H	.284"	2.655"	42.0	3,007 fps	42,400 CUP	45.0	3,172 fps	49,900 CUP
	AR2208	.284"	2.655"	43.0	3,019 fps	41,200 CUP	46.3	3,216 fps	50,100 CUP
120 GR. NOS BT	Bench Mark 2	.284"	2.800"	39.0	2,812 fps	40,900 CUP	41.3	2,968 fps	49,000 CUP
	Bench Mark 8208	.284"	2.800"	40.1	2,830 fps	40,500 CUP	42.7	2,997 fps	48,900 CUP
	AR2206H	.284"	2.800"	41.0	2,931 fps	42,200 CUP	43.7	3,085 fps	49,700 CUP
	AR2208	.284"	2.800"	42.5	2,996 fps	43,800 CUP	45.0	3,117 fps	49,900 CUP
	AR2209	.284"	2.800"	48.0	2,895 fps	39,300 CUP	50.0C	3,039 fps	44,600 CUP
130 GR. SIE HPBT	Bench Mark 2	.284"	2.800"	37.0	2,701 fps	41,500 CUP	39.8	2,861 fps	50,200 CUP
	Bench Mark 8208	.284"	2.800"	39.1	2,755 fps	42,600 CUP	41.6	2,922 fps	50,400 CUP
	AR2206H	.284"	2.800"	39.5	2,824 fps	43,500 CUP	42.0	2,957 fps	50,200 CUP
	AR2208	.284"	2.800"	40.0	2,830 fps	43,400 CUP	43.5	3,004 fps	50,100 CUP
	AR2209	.284"	2.800"	47.0	2,871 fps	43,000 CUP	50.0C	2,998 fps	47,400 CUP
139 GR. HDY SP	Bench Mark 2	.284"	2.800"	37.5	2,624 fps	40,300 CUP	40.5	2,799 fps	49,600 CUP
	Bench Mark 8208	.284"	2.800"	39.0	2,642 fps	41,200 CUP	41.5	2,783 fps	49,000 CUP
	AR2206H	.284"	2.800"	39.0	2,678 fps	42,500 CUP	42.5	2,857 fps	50,200 CUP
	AR2208	.284"	2.800"	40.5	2,721 fps	44,700 CUP	43.5	2,877 fps	50,000 CUP
	AR2209	.284"	2.800"	47.0	2,729 fps	40,400 CUP	50.0C	2,906 fps	47,500 CUP
140 GR. SFT SP	Trail Boss	.284"	2.750"	11.0	1,211 fps	36,200 CUP	16.0	1,472 fps	43,300 CUP
	Bench Mark 2	.284"	2.750"	36.0	2,564 fps	42,600 CUP	38.3	2,688 fps	49,300 CUP
	Bench Mark 8208	.284"	2.750"	37.3	2,606 fps	43,200 CUP	39.7	2,732 fps	48,800 CUP
	AR2206H	.284"	2.750"	38.0	2,618 fps	42,000 CUP	40.5	2,769 fps	49,700 CUP
	AR2208	.284"	2.750"	39.5	2,695 fps	43,700 CUP	42.2	2,819 fps	49,800 CUP
	AR2209	.284"	2.750"	45.0	2,692 fps	42,300 CUP	48.0C	2,868 fps	49,800 CUP
145 GR. SPR SP	Bench Mark 2	.284"	2.730"	36.0	2,487 fps	40,900 CUP	39.5	2,693 fps	50,700 CUP
	Bench Mark 8208	.284"	2.730"	37.8	2,589 fps	43,700 CUP	40.2	2,721 fps	50,200 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

7mm-08 Remington				Case: Remington Twist: 1:9.5" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.025"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.284"	2.730"	38.5	2,599 fps	44,400 CUP	41.0	2,728 fps	49,800 CUP
	AR2208	.284"	2.730"	39.0	2,639 fps	46,200 CUP	41.5	2,745 fps	50,200 CUP
	AR2209	.284"	2.730"	45.0	2,647 fps	42,300 CUP	48.0C	2,801 fps	49,800 CUP
150 GR. BAR TTSX BT	Bench Mark 2	.284"	2.770"	34.8	2,369 fps	45,900 CUP	37.0	2,506 fps	50,600 CUP
	Bench Mark 8208	.284"	2.770"	35.2	2,404 fps	44,600 CUP	37.4	2,518 fps	50,700 CUP
	AR2206H	.284"	2.770"	34.8	2,428 fps	45,200 CUP	37.0	2,561 fps	50,700 CUP
	AR2208	.284"	2.770"	37.3	2,448 fps	43,400 CUP	39.7	2,580 fps	50,700 CUP
	AR2209	.284"	2.770"	41.9	2,475 fps	40,100 CUP	45.5C	2,659 fps	50,400 CUP
150 GR. SIE HPBT	Bench Mark 2	.284"	2.800"	36.0	2,526 fps	43,300 CUP	38.5	2,667 fps	50,200 CUP
	Bench Mark 8208	.284"	2.800"	36.9	2,539 fps	43,200 CUP	39.3	2,677 fps	49,900 CUP
	AR2206H	.284"	2.800"	37.0	2,546 fps	43,300 CUP	40.5	2,723 fps	50,000 CUP
	AR2208	.284"	2.800"	38.5	2,597 fps	42,400 CUP	41.3	2,731 fps	50,000 CUP
	AR2209	.284"	2.800"	42.0	2,549 fps	40,600 CUP	45.4	2,724 fps	51,500 CUP
154 GR. HDY SP	Bench Mark 2	.284"	2.800"	36.0	2,467 fps	42,900 CUP	38.5	2,597 fps	49,500 CUP
	Bench Mark 8208	.284"	2.800"	36.2	2,482 fps	43,200 CUP	38.5	2,587 fps	49,100 CUP
	AR2206H	.284"	2.800"	37.0	2,484 fps	44,200 CUP	39.5	2,592 fps	49,900 CUP
	AR2208	.284"	2.800"	38.5	2,530 fps	44,100 CUP	41.2	2,666 fps	50,300 CUP
	AR2209	.284"	2.800"	42.3	2,531 fps	46,100 CUP	45.0	2,645 fps	51,300 CUP
	AR2213SC	.284"	2.800"	48.0	2,550 fps	40,900 CUP	49.5C	2,625 fps	44,500 CUP
160 GR. SPR SPBT	Bench Mark 2	.284"	2.800"	36.0	2,457 fps	44,100 CUP	38.5	2,592 fps	50,700 CUP
	Bench Mark 8208	.284"	2.800"	35.5	2,459 fps	45,400 CUP	37.7	2,554 fps	49,900 CUP
	AR2206H	.284"	2.800"	35.0	2,420 fps	44,400 CUP	38.5	2,530 fps	50,000 CUP
	AR2208	.284"	2.800"	36.5	2,451 fps	43,400 CUP	39.0	2,562 fps	49,900 CUP
	AR2209	.284"	2.800"	40.9	2,471 fps	45,400 CUP	43.5	2,583 fps	50,800 CUP
	AR2213SC	.284"	2.800"	47.5	2,547 fps	43,700 CUP	49.5C	2,627 fps	47,500 CUP
162 GR. HDY A-MAX	Bench Mark 2	.284"	2.875"	36.0	2,441 fps	43,100 CUP	38.0	2,557 fps	49,200 CUP
	Bench Mark 8208	.284"	2.875"	36.2	2,499 fps	41,000 CUP	40.2	2,725 fps	50,800 CUP
	AR2206H	.284"	2.875"	37.0	2,462 fps	43,700 CUP	39.5	2,600 fps	49,800 CUP
	AR2208	.284"	2.875"	38.5	2,504 fps	43,400 CUP	41.0	2,644 fps	49,800 CUP
	AR2209	.284"	2.875"	41.4	2,443 fps	40,400 CUP	45.0	2,622 fps	50,500 CUP
	AR2213SC	.284"	2.875"	47.5	2,501 fps	39,000 CUP	48.5C	2,555 fps	42,400 CUP
168 GR. SIE HPBT	Bench Mark 2	.284"	2.800"	36.0	2,389 fps	43,500 CUP	38.0	2,517 fps	49,400 CUP
	Bench Mark 8208	.284"	2.800"	34.9	2,414 fps	46,400 CUP	37.1	2,486 fps	49,600 CUP
	AR2206H	.284"	2.800"	36.5	2,390 fps	45,400 CUP	39.0	2,504 fps	49,700 CUP
	AR2208	.284"	2.800"	37.5	2,430 fps	44,600 CUP	40.0	2,540 fps	50,100 CUP
	AR2209	.284"	2.800"	41.6	2,431 fps	42,500 CUP	44.2	2,551 fps	50,700 CUP
	AR2213SC	.284"	2.800"	47.0	2,438 fps	39,700 CUP	49.0C	2,545 fps	45,000 CUP
175 GR. NOS PART	Bench Mark 2	.284"	2.800"	34.0	2,202 fps	42,400 CUP	36.5	2,333 fps	49,700 CUP
	Bench Mark 8208	.284"	2.800"	33.4	2,264 fps	43,200 CUP	35.5	2,372 fps	48,200 CUP
	AR2206H	.284"	2.800"	35.0	2,240 fps	44,500 CUP	37.5	2,354 fps	49,700 CUP
	AR2208	.284"	2.800"	35.0	2,231 fps	43,400 CUP	37.5	2,344 fps	49,500 CUP
	AR2209	.284"	2.800"	39.9	2,303 fps	41,900 CUP	42.4	2,451 fps	50,400 CUP
	AR2213SC	.284"	2.800"	47.0	2,443 fps	46,600 CUP	49.0C	2,516 fps	49,400 CUP

RIFLE DATA

7mm Shooting Times Easterner				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 22" Trim length: 2.010"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
120 GR. NOS FP	AR2206H	.284"	2.475"	37.0	2,529 fps	-	41.0	2,909 fps	-
	AR2209	.284"	2.475"	44.0	2,503 fps	-	49.0	2,873 fps	-
139 GR. HDY FP	AR2209	.284"	2.500"	43.0	2,271 fps	-	48.0	2,676 fps	-
7 x 57mm Mauser				Case: Winchester Twist: 1:8.75" Primer: Winchester LR			Barrel length: 24" Trim length: 2.225"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY HP	Bench Mark 2	.284"	2.900"	41.5	2,987 fps	39,900 CUP	44.3	3,138 fps	45,800 CUP
	Bench Mark 8208	.284"	2.900"	40.0	2,939 fps	40,500 CUP	44.0	3,113 fps	45,500 CUP
	AR2206H	.284"	2.900"	44.0	3,095 fps	41,200 CUP	46.0	3,208 fps	45,400 CUP
	AR2208	.284"	2.900"	45.0	3,123 fps	42,000 CUP	48.0	3,250 fps	45,600 CUP
	AR2209	.284"	2.900"	51.0	2,993 fps	36,000 CUP	54.0C	3,166 fps	41,200 CUP
110 GR. SPR HP	Bench Mark 2	.284"	2.980"	41.0	2,874 fps	39,300 CUP	44.0	3,034 fps	45,700 CUP
	Bench Mark 8208	.284"	2.980"	39.0	2,823 fps	43,400 CUP	43.5	3,006 fps	45,900 CUP
	AR2206H	.284"	2.980"	43.0	2,939 fps	39,600 CUP	46.0	3,078 fps	45,000 CUP
	AR2208	.284"	2.980"	41.0	2,902 fps	40,900 CUP	45.5	3,081 fps	46,000 CUP
	AR2209	.284"	2.980"	51.0	2,865 fps	36,000 CUP	54.0C	3,046 fps	41,900 CUP
120 GR. NOS BT	Bench Mark 2	.284"	3.000"	39.0	2,743 fps	42,900 CUP	41.5	2,863 fps	46,000 CUP
	Bench Mark 8208	.284"	3.000"	37.0	2,652 fps	42,800 CUP	41.0	2,821 fps	45,800 CUP
	AR2206H	.284"	3.000"	40.0	2,732 fps	40,900 CUP	42.0	2,859 fps	45,400 CUP
	AR2208	.284"	3.000"	41.0	2,820 fps	41,700 CUP	44.0	2,979 fps	46,000 CUP
	AR2209	.284"	3.000"	48.0	2,790 fps	40,300 CUP	51.0C	2,945 fps	45,800 CUP
	AR2213SC	.284"	3.000"	50.0	2,650 fps	36,500 CUP	52.5C	2,777 fps	40,800 CUP
130 GR. SPR SP	Bench Mark 2	.284"	2.800"	39.0	2,674 fps	43,300 CUP	41.2	2,765 fps	46,000 CUP
	Bench Mark 8208	.284"	2.800"	35.0	2,488 fps	41,700 CUP	39.0	2,676 fps	46,100 CUP
	AR2206H	.284"	2.800"	38.0	2,579 fps	40,600 CUP	41.0	2,704 fps	46,000 CUP
	AR2208	.284"	2.800"	39.0	2,678 fps	40,400 CUP	42.0	2,800 fps	45,700 CUP
	AR2209	.284"	2.800"	47.0	2,682 fps	40,500 CUP	50.0	2,848 fps	46,000 CUP
140 GR. NOS BT	Bench Mark 2	.284"	3.000"	35.5	2,441 fps	40,900 CUP	38.0	2,571 fps	45,700 CUP
	Bench Mark 8208	.284"	3.000"	33.0	2,335 fps	44,100 CUP	37.0	2,522 fps	46,100 CUP
	AR2206H	.284"	3.000"	35.0	2,376 fps	39,800 CUP	37.5	2,530 fps	45,800 CUP
	AR2208	.284"	3.000"	35.0	2,368 fps	40,800 CUP	37.7	2,516 fps	46,000 CUP
	AR2209	.284"	3.000"	43.0	2,530 fps	40,400 CUP	46.5	2,682 fps	46,000 CUP
	AR2213SC	.284"	3.000"	47.0	2,520 fps	42,500 CUP	49.5C	2,719 fps	46,000 CUP
150 GR. BAR TTSX	Bench Mark 2	.284"	2.965"	31.0	2,194 fps	40,300 CUP	35.0	2,356 fps	45,000 CUP
	AR2206H	.284"	2.965"	31.0	2,167 fps	37,700 CUP	35.0	2,403 fps	45,700 CUP
	AR2208	.284"	2.965"	32.0	2,183 fps	38,600 CUP	36.5	2,415 fps	45,900 CUP
	AR2209	.284"	2.965"	38.0	2,288 fps	36,900 CUP	42.5C	2,502 fps	45,300 CUP
	AR2213SC	.284"	2.965"	42.0	2,318 fps	39,000 CUP	46.0C	2,495 fps	45,000 CUP
150 GR. NOS BT	Bench Mark 2	.284"	3.000"	34.0	2,291 fps	40,900 CUP	36.0	2,365 fps	45,700 CUP
	Bench Mark 8208	.284"	3.000"	32.0	2,206 fps	39,500 CUP	36.0	2,401 fps	45,800 CUP
	AR2206H	.284"	3.000"	34.0	2,271 fps	40,200 CUP	36.0	2,383 fps	46,000 CUP
	AR2208	.284"	3.000"	34.0	2,265 fps	40,900 CUP	36.0	2,372 fps	45,600 CUP
	AR2209	.284"	3.000"	41.0	2,364 fps	38,800 CUP	44.0	2,513 fps	45,500 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

7 x 57mm Mauser				Case: Winchester			Barrel length: 24"		
				Twist: 1:8.75"			Trim length: 2.225"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. NOS PART	AR2213SC	.284"	3.000"	45.0	2,411 fps	41,700 CUP	48.0	2,542 fps	46,000 CUP
	Bench Mark 2	.284"	3.000"	32.5	2,174 fps	40,800 CUP	34.7	2,284 fps	45,700 CUP
	Bench Mark 8208	.284"	3.000"	31.0	2,106 fps	38,000 CUP	34.5	2,287 fps	45,900 CUP
	AR2206H	.284"	3.000"	33.0	2,165 fps	40,200 CUP	34.5	2,245 fps	44,700 CUP
	AR2208	.284"	3.000"	33.0	2,160 fps	41,100 CUP	35.0	2,261 fps	45,900 CUP
	AR2209	.284"	3.000"	40.0	2,314 fps	42,100 CUP	42.5	2,399 fps	45,400 CUP
168 GR. SIE HPBT	AR2213SC	.284"	3.000"	43.0	2,311 fps	41,500 CUP	46.0	2,415 fps	45,700 CUP
	Bench Mark 2	.284"	3.000"	33.5	2,212 fps	40,900 CUP	36.0	2,336 fps	46,000 CUP
	Bench Mark 8208	.284"	3.000"	31.0	3,100 fps	39,100 CUP	34.0	2,260 fps	45,800 CUP
	AR2206H	.284"	3.000"	33.0	2,118 fps	36,400 CUP	34.5	2,211 fps	42,600 CUP
	AR2208	.284"	3.000"	34.5	2,232 fps	36,600 CUP	37.5	2,404 fps	45,500 CUP
	AR2209	.284"	3.000"	40.0	2,267 fps	40,400 CUP	42.5	2,378 fps	44,100 CUP
175 GR. NOS PART	AR2213SC	.284"	3.000"	43.0	2,244 fps	38,100 CUP	46.0	2,393 fps	43,900 CUP
	AR2217	.284"	3.000"	49.0	2,338 fps	40,800 CUP	52.0C	2,485 fps	46,000 CUP
	AR2208	.284"	3.025"	31.0	2,005 fps	34,200 CUP	35.0	2,178 fps	45,500 CUP
	AR2209	.284"	3.025"	35.0	2,066 fps	39,700 CUP	37.0	2,159 fps	43,400 CUP
	AR2213SC	.284"	3.025"	37.0	2,098 fps	41,300 CUP	40.0	2,201 fps	45,700 CUP
	AR2217	.284"	3.025"	42.0	2,038 fps	41,000 CUP	44.5	2,239 fps	45,500 CUP
280 Remington (7mm Express Remington)				Case: Remington			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.530"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SIE HP	AR2206H	.284"	3.180"	47.0	3,226 fps	42,800 CUP	50.5	3,418 fps	49,000 CUP
	AR2208	.284"	3.180"	48.0	3,254 fps	42,400 CUP	51.3	3,433 fps	48,300 CUP
	AR2209	.284"	3.180"	56.0	3,167 fps	41,400 CUP	60.5	3,379 fps	49,200 CUP
	AR2213SC	.284"	3.180"	59.0	3,053 fps	38,900 CUP	63.0C	3,266 fps	46,000 CUP
115 GR. SPR HP	AR2206H	.284"	3.180"	46.0	3,033 fps	42,600 CUP	49.0	3,175 fps	48,300 CUP
	AR2208	.284"	3.180"	46.0	3,040 fps	43,500 CUP	49.0	3,170 fps	47,700 CUP
	AR2209	.284"	3.180"	54.0	3,017 fps	40,200 CUP	58.5	3,234 fps	48,100 CUP
	AR2213SC	.284"	3.180"	58.0	3,014 fps	40,600 CUP	62.0C	3,190 fps	47,300 CUP
120 GR. BAR TSX	AR2206H	.284"	3.230"	46.9	3,067 fps	54,300 PSI	49.9	3,171 fps	57,200 PSI
	AR2208	.284"	3.230"	47.7	3,007 fps	48,800 PSI	50.7	3,177 fps	57,200 PSI
	AR2209	.284"	3.230"	55.5	3,093 fps	49,100 PSI	59.0C	3,254 fps	57,400 PSI
	AR2213SC	.284"	3.230"	58.0	2,923 fps	43,600 PSI	63.0C	3,124 fps	53,100 PSI
140 GR. NOS PART	AR2206H	.284"	3.230"	42.0	2,711 fps	43,200 CUP	45.2	2,830 fps	48,400 CUP
	AR2208	.284"	3.230"	42.0	2,674 fps	41,400 CUP	45.5	2,838 fps	48,100 CUP
	AR2209	.284"	3.230"	50.0	2,756 fps	41,900 CUP	53.5	2,918 fps	48,500 CUP
	AR2213SC	.284"	3.230"	54.0	2,732 fps	41,000 CUP	58.5	2,927 fps	48,500 CUP
145 GR. SPR SP	AR2206H	.284"	3.160"	38.0	2,434 fps	43,800 CUP	41.0	2,596 fps	48,400 CUP
	AR2208	.284"	3.160"	39.0	2,469 fps	44,900 CUP	43.0	2,690 fps	48,000 CUP
	AR2209	.284"	3.160"	45.0	2,553 fps	44,500 CUP	48.8	2,714 fps	49,900 CUP
	AR2213SC	.284"	3.160"	48.0	2,579 fps	46,900 CUP	53.0	2,727 fps	50,000 CUP
150 GR. NOS PART	AR2206H	.284"	3.300"	38.0	2,430 fps	43,700 CUP	41.5	2,588 fps	50,000 CUP
	AR2208	.284"	3.300"	39.0	2,485 fps	44,000 CUP	42.0	2,611 fps	49,800 CUP

C = Compressed Load: L = Lead Projectile

RIFLE DATA

280 Remington (7mm Express Remington)				Case: Remington Twist: 1:10" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.530"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. SFT SP	AR2209	.284"	3.300"	46.0	2,550 fps	42,500 CUP	49.7	2,700 fps	49,300 CUP
	AR2213SC	.284"	3.300"	50.0	2,579 fps	45,100 CUP	53.7	2,709 fps	49,500 CUP
	AR2217	.284"	3.300"	56.0	2,647 fps	43,500 CUP	60.0C	2,797 fps	49,300 CUP
	AR2206H	.284"	3.240"	38.0	2,341 fps	40,300 CUP	41.5	2,535 fps	49,500 CUP
	AR2208	.284"	3.240"	39.0	2,384 fps	43,000 CUP	42.5	2,555 fps	49,300 CUP
162 GR. HDY A-MAX	AR2209	.284"	3.240"	46.0	2,441 fps	40,900 CUP	49.5	2,610 fps	48,900 CUP
	AR2213SC	.284"	3.240"	51.0	2,464 fps	40,600 CUP	55.0	2,660 fps	49,500 CUP
	AR2217	.284"	3.240"	57.0	2,517 fps	40,700 CUP	61.0C	2,714 fps	47,500 CUP
	AR2206H	.284"	3.330"	38.0	2,396 fps	42,800 CUP	41.5	2,567 fps	50,000 CUP
	AR2208	.284"	3.330"	39.0	2,443 fps	44,100 CUP	42.0	2,573 fps	49,500 CUP
168 GR. SIE HPBT	AR2209	.284"	3.330"	46.0	2,468 fps	42,300 CUP	49.5	2,614 fps	49,900 CUP
	AR2213SC	.284"	3.330"	51.0	2,517 fps	44,100 CUP	54.5	2,644 fps	49,300 CUP
	AR2217	.284"	3.330"	56.0	2,526 fps	40,300 CUP	60.0C	2,711 fps	47,200 CUP
	AR2206H	.284"	3.330"	38.0	2,329 fps	45,900 CUP	41.2	2,468 fps	49,600 CUP
	AR2208	.284"	3.330"	40.0	2,424 fps	45,800 CUP	42.2	2,523 fps	49,900 CUP
175 GR. HDY SP	AR2209	.284"	3.330"	46.0	2,422 fps	41,300 CUP	50.0	2,586 fps	49,400 CUP
	AR2213SC	.284"	3.330"	51.0	2,462 fps	42,400 CUP	54.5	2,605 fps	49,200 CUP
	AR2217	.284"	3.330"	56.0	2,506 fps	39,400 CUP	60.0C	2,700 fps	49,300 CUP
	AR2209	.284"	3.300"	44.0	2,343 fps	44,600 CUP	46.5	2,447 fps	49,300 CUP
	AR2213SC	.284"	3.300"	48.0	2,362 fps	44,400 CUP	51.0	2,477 fps	49,800 CUP
180 GR. HDY SP	AR2217	.284"	3.300"	54.0	2,502 fps	47,000 CUP	57.0C	2,583 fps	49,600 CUP
284 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.160"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SIE HP	Bench Mark 8208	.284"	2.800"	48.9	3,322 fps	44,800 CUP	52.0	3,478 fps	52,000 CUP
	AR2206H	.284"	2.800"	47.0	3,213 fps	45,800 CUP	51.5	3,428 fps	51,600 CUP
	AR2208	.284"	2.800"	51.0	3,242 fps	45,900 CUP	54.0	3,435 fps	52,900 CUP
	AR2209	.284"	2.800"	55.0	3,096 fps	39,600 CUP	60.0C	3,368 fps	49,000 CUP
115 GR. SPR SP	AR2206H	.284"	2.800"	45.0	3,000 fps	43,500 CUP	50.0	3,245 fps	52,400 CUP
	AR2208	.284"	2.800"	49.0	3,096 fps	46,900 CUP	53.0	3,281 fps	53,400 CUP
	AR2209	.284"	2.800"	54.0	3,008 fps	40,200 CUP	59.0C	3,305 fps	52,200 CUP
120 GR. HDY V-MAX	Bench Mark 8208	.284"	2.825"	45.1	3,032 fps	45,600 CUP	48.0	3,134 fps	52,600 CUP
	AR2206H	.284"	2.825"	43.0	2,880 fps	41,400 CUP	48.0	3,120 fps	51,600 CUP
	AR2208	.284"	2.825"	45.0	2,919 fps	43,200 CUP	50.5	3,158 fps	52,200 CUP
	AR2209	.284"	2.825"	53.0	3,017 fps	44,700 CUP	57.0C	3,174 fps	49,600 CUP
	AR2213SC	.284"	2.825"	56.0	2,846 fps	38,900 CUP	60.0C	3,018 fps	45,200 CUP
130 GR. BAR XBT	AR2206H	.284"	2.850"	44.0	2,853 fps	47,300 CUP	47.5	2,984 fps	52,100 CUP
	AR2208	.284"	2.850"	45.0	2,844 fps	47,400 CUP	49.7	3,026 fps	52,700 CUP
	AR2209	.284"	2.850"	53.0	2,920 fps	45,700 CUP	57.0C	3,095 fps	50,900 CUP
	AR2213SC	.284"	2.850"	56.0	2,788 fps	40,500 CUP	60.0C	2,923 fps	46,300 CUP
139 GR. HDY SST	Bench Mark 8208	.284"	2.915"	42.8	2,772 fps	43,900 CUP	45.5	2,914 fps	51,900 CUP
	AR2206H	.284"	2.915"	43.0	2,811 fps	48,000 CUP	47.0	2,943 fps	51,700 CUP
	AR2208	.284"	2.915"	45.0	2,777 fps	44,400 CUP	49.5	2,996 fps	52,600 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

284 Winchester				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.160"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2209	.284"	2.915"	52.0	2,840 fps	44,300 CUP	57.0C	3,079 fps	52,400 CUP
	AR2213SC	.284"	2.915"	56.0	2,760 fps	40,000 CUP	60.0C	2,923 fps	46,900 CUP
145 GR. SPR SP	AR2206H	.284"	2.800"	43.0	2,736 fps	47,500 CUP	46.5	2,856 fps	51,600 CUP
	AR2208	.284"	2.800"	45.0	2,771 fps	48,300 CUP	49.0	2,905 fps	52,500 CUP
	AR2209	.284"	2.800"	50.0	2,743 fps	45,600 CUP	55.0	2,964 fps	53,200 CUP
	AR2213SC	.284"	2.800"	55.0	2,733 fps	45,200 CUP	60.0C	2,945 fps	52,500 CUP
150 GR. SFT SCIR	AR2206H	.284"	2.950"	43.0	2,719 fps	48,100 CUP	46.5	2,818 fps	52,300 CUP
	AR2208	.284"	2.950"	44.0	2,674 fps	45,400 CUP	48.7	2,863 fps	52,800 CUP
	AR2209	.284"	2.950"	50.0	2,721 fps	46,100 CUP	54.7C	2,913 fps	52,300 CUP
	AR2213SC	.284"	2.950"	55.0	2,682 fps	45,200 CUP	59.0C	2,852 fps	50,100 CUP
160 GR. BAR TSX	AR2206H	.284"	2.870"	40.0	2,374 fps	42,800 CUP	45.0	2,593 fps	51,500 CUP
	AR2208	.284"	2.870"	42.0	2,397 fps	43,100 CUP	46.5	2,632 fps	51,800 CUP
	AR2209	.284"	2.870"	47.0	2,497 fps	43,700 CUP	52.0C	2,672 fps	50,400 CUP
	AR2213SC	.284"	2.870"	50.0	2,391 fps	38,300 CUP	55.5C	2,629 fps	47,400 CUP
162 GR. HDY BTSP	AR2206H	.284"	2.970"	40.0	2,502 fps	42,900 CUP	44.2	2,703 fps	51,600 CUP
	AR2208	.284"	2.970"	42.0	2,557 fps	43,800 CUP	47.0	2,764 fps	52,500 CUP
	AR2209	.284"	2.970"	50.0	2,712 fps	47,600 CUP	53.5C	2,847 fps	53,000 CUP
	AR2213SC	.284"	2.970"	53.0	2,617 fps	44,500 CUP	58.0C	2,816 fps	50,900 CUP
168 GR. SIE HPBT	AR2206H	.284"	2.900"	40.0	2,531 fps	46,200 CUP	44.0	2,689 fps	52,300 CUP
	AR2208	.284"	2.900"	42.0	2,576 fps	45,400 CUP	47.0	2,736 fps	52,500 CUP
	AR2209	.284"	2.900"	50.0	2,668 fps	47,400 CUP	53.5C	2,822 fps	53,000 CUP
	AR2213SC	.284"	2.900"	53.0	2,602 fps	45,100 CUP	58.0C	2,807 fps	52,700 CUP
175 GR. SFT SP	AR2208	.284"	2.930"	42.0	2,413 fps	45,800 CUP	46.0	2,582 fps	52,600 CUP
	AR2209	.284"	2.930"	47.0	2,483 fps	44,900 CUP	51.5C	2,649 fps	52,000 CUP
	AR2213SC	.284"	2.930"	52.0	2,482 fps	44,500 CUP	57.0C	2,695 fps	52,900 CUP
280 Ackley Improved				Case: Nosler Twist: 1:9" Primer: Winchester LR			Barrel length: 24" Trim length: 2.530"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
120 GR. NOS BT	AR2206H	.284"	3.320"	44.7	2,974 fps	51,800 PSI	47.5	3,128 fps	60,700 PSI
	AR2208	.284"	3.320"	47.0	2,988 fps	52,200 PSI	50.0	3,153 fps	61,300 PSI
	AR2209	.284"	3.320"	55.5	3,120 fps	54,000 PSI	59.0	3,271 fps	61,400 PSI
	AR2213SC	.284"	3.320"	61.1	3,024 fps	52,200 PSI	65.0C	3,240 fps	60,900 PSI
	AR2217	.284"	3.320"	62.0	2,924 fps	45,100 PSI	66.0C	3,120 fps	54,400 PSI
130 GR. SIE HPBT	AR2206H	.284"	3.320"	42.8	2,813 fps	51,200 PSI	45.5	2,953 fps	60,300 PSI
	AR2208	.284"	3.320"	44.7	2,855 fps	53,500 PSI	47.5	2,991 fps	60,800 PSI
	AR2209	.284"	3.320"	50.8	2,913 fps	53,300 PSI	54.0	3,051 fps	60,000 PSI
	AR2213SC	.284"	3.320"	57.3	2,910 fps	53,800 PSI	61.0	3,060 fps	61,300 PSI
	AR2217	.284"	3.320"	60.6	2,910 fps	51,600 PSI	64.5C	3,065 fps	59,800 PSI
140 GR. NOS BT	AR2206H	.284"	3.330"	42.8	2,737 fps	53,600 PSI	45.5	2,876 fps	61,600 PSI
	AR2208	.284"	3.330"	44.6	2,754 fps	54,100 PSI	47.4	2,903 fps	60,400 PSI
	AR2209	.284"	3.330"	52.2	2,893 fps	55,200 PSI	55.5	3,012 fps	61,600 PSI
	AR2213SC	.284"	3.330"	58.3	2,841 fps	53,600 PSI	62.0C	3,012 fps	61,100 PSI
	AR2217	.284"	3.330"	60.0	2,778 fps	48,200 PSI	64.0C	2,972 fps	58,700 PSI

C = Compressed Load: L = Lead Projectile

RIFLE DATA

280 Ackley Improved				Case: Nosler			Barrel length: 24"		
				Twist: 1:9"			Trim length: 2.530"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. BAR TSX	AR2206H	.284"	3.230"	41.4	2,598 fps	52,800 PSI	44.0	2,716 fps	59,900 PSI
	AR2208	.284"	3.230"	43.0	2,632 fps	53,800 PSI	45.8	2,750 fps	60,900 PSI
	AR2209	.284"	3.230"	49.5	2,736 fps	55,600 PSI	52.7	2,855 fps	61,600 PSI
	AR2213SC	.284"	3.230"	54.1	2,705 fps	51,900 PSI	57.5C	2,840 fps	59,900 PSI
	AR2217	.284"	3.230"	54.5	2,592 fps	54,100 PSI	61.0C	2,826 fps	56,900 PSI
150 GR. SFT SCIR	AR2206H	.284"	3.330"	42.0	2,633 fps	52,100 PSI	44.6	2,773 fps	61,200 PSI
	AR2208	.284"	3.330"	43.5	2,647 fps	51,700 PSI	46.3	2,796 fps	59,300 PSI
	AR2209	.284"	3.330"	48.0	2,676 fps	51,900 PSI	54.5	2,908 fps	61,700 PSI
	AR2213SC	.284"	3.330"	53.6	2,657 fps	51,500 PSI	57.0	2,773 fps	61,200 PSI
	AR2217	.284"	3.330"	58.5	2,724 fps	57,100 PSI	62.2C	2,883 fps	60,300 PSI
160 GR. NOS AB	AR2206H	.284"	3.330"	40.9	2,496 fps	52,300 PSI	43.5	2,615 fps	59,500 PSI
	AR2208	.284"	3.330"	43.2	2,551 fps	53,200 PSI	46.0	2,685 fps	62,000 PSI
	AR2209	.284"	3.330"	48.4	2,633 fps	54,100 PSI	51.5	2,747 fps	60,700 PSI
	AR2213SC	.284"	3.330"	54.0	2,674 fps	55,000 PSI	57.5C	2,812 fps	62,000 PSI
	AR2217	.284"	3.330"	57.3	2,672 fps	54,200 PSI	61.0C	2,808 fps	61,100 PSI
162 GR. HDY BTSP	AR2206H	.284"	3.325"	40.9	2,535 fps	53,800 PSI	43.5	2,651 fps	61,400 PSI
	AR2208	.284"	3.325"	42.6	2,570 fps	54,600 PSI	45.3	2,690 fps	62,000 PSI
	AR2209	.284"	3.325"	47.6	2,629 fps	52,900 PSI	50.6	2,755 fps	60,800 PSI
	AR2213SC	.284"	3.325"	53.0	2,662 fps	54,200 PSI	56.4	2,788 fps	61,400 PSI
	AR2217	.284"	3.325"	56.8	2,653 fps	52,300 PSI	60.4	2,797 fps	61,300 PSI
168 GR. SIE HPBT	AR2206H	.284"	3.330"	40.4	2,474 fps	52,300 PSI	43.0	2,595 fps	60,900 PSI
	AR2208	.284"	3.330"	43.0	2,518 fps	53,700 PSI	46.0	2,667 fps	62,100 PSI
	AR2209	.284"	3.330"	48.4	2,621 fps	54,500 PSI	51.5	2,734 fps	61,800 PSI
	AR2213SC	.284"	3.330"	54.0	2,653 fps	55,100 PSI	57.7	2,779 fps	62,000 PSI
	AR2217	.284"	3.330"	57.8	2,641 fps	52,500 PSI	61.5C	2,789 fps	61,100 PSI
	AR2225	.284"	3.330"	59.0	2,652 fps	49,000 PSI	63.0C	2,831 fps	59,300 PSI
175 GR. SFT SP	AR2209	.284"	3.270"	47.7	2,515 fps	54,700 PSI	50.7	2,626 fps	62,100 PSI
	AR2213SC	.284"	3.270"	52.0	2,496 fps	51,900 PSI	55.5	2,651 fps	62,000 PSI
	AR2217	.284"	3.270"	55.5	2,544 fps	52,700 PSI	59.0C	2,675 fps	61,100 PSI
	AR2225	.284"	3.270"	56.7	2,604 fps	52,400 PSI	60.3C	2,743 fps	59,800 PSI

7mm Rem. S.A. Ultra Mag.				Case: Remington			Barrel length: 24"		
				Twist: 1:9.25"			Trim length: 2.025"		
				Primer: Remington 9 1/2M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY HP	AR2206H	.284"	2.700"	53.0	3,450 fps	53,900 PSI	57.0	3,631 fps	62,800 PSI
	AR2208	.284"	2.700"	56.0	3,418 fps	52,600 PSI	60.0	3,626 fps	63,000 PSI
	AR2209	.284"	2.700"	63.0	3,424 fps	52,500 PSI	66.5C	3,622 fps	63,100 PSI
110 GR. SPR TNT HP	AR2206H	.284"	2.730"	53.0	3,351 fps	55,400 PSI	56.5	3,494 fps	62,700 PSI
	AR2208	.284"	2.730"	54.0	3,295 fps	52,500 PSI	59.0	3,513 fps	63,200 PSI
	AR2209	.284"	2.730"	61.0	3,263 fps	49,400 PSI	65.0	3,499 fps	62,600 PSI
115 GR. SPR HP	AR2206H	.284"	2.650"	51.0	3,211 fps	55,700 PSI	54.0	3,336 fps	62,400 PSI
	AR2208	.284"	2.650"	54.0	3,234 fps	54,300 PSI	58.0	3,402 fps	62,800 PSI
	AR2209	.284"	2.650"	60.0	3,196 fps	51,100 PSI	64.0	3,413 fps	63,200 PSI
	AR2213SC	.284"	2.650"	65.0	3,212 fps	53,800 PSI	68.0C	3,342 fps	61,400 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

7mm Rem. S.A. Ultra Mag.				Case: Remington Twist: 1:9.25" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.025"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
120 GR. BAR TSX	AR2208	.284"	2.725"	51.0	3,120 fps	52,900 PSI	55.5	3,310 fps	62,500 PSI
	AR2209	.284"	2.725"	58.0	3,130 fps	51,300 PSI	63.2	3,375 fps	63,700 PSI
	AR2213SC	.284"	2.725"	63.0	3,077 fps	50,100 PSI	67.0C	3,243 fps	58,200 PSI
130 GR. SIE HPBT	AR2208	.284"	2.800"	51.0	3,057 fps	55,700 PSI	54.0	3,190 fps	62,900 PSI
	AR2209	.284"	2.800"	57.0	3,060 fps	53,700 PSI	60.5	3,222 fps	62,600 PSI
	AR2213SC	.284"	2.800"	61.0	3,017 fps	52,300 PSI	65.0	3,192 fps	62,600 PSI
140 GR. NOS BT	AR2208	.284"	2.825"	50.0	2,945 fps	56,500 PSI	53.5	3,068 fps	62,300 PSI
	AR2209	.284"	2.825"	56.0	2,910 fps	50,600 PSI	60.0	3,122 fps	63,200 PSI
	AR2213SC	.284"	2.825"	61.0	2,928 fps	52,800 PSI	64.5C	3,099 fps	63,100 PSI
145 GR. SPR HPBT	AR2208	.284"	2.750"	49.0	2,865 fps	56,100 PSI	52.5	2,999 fps	63,400 PSI
	AR2209	.284"	2.750"	55.0	2,943 fps	54,000 PSI	58.5	3,093 fps	62,800 PSI
	AR2213SC	.284"	2.750"	59.0	2,909 fps	52,300 PSI	63.0	3,094 fps	63,100 PSI
150 GR. SFT SCIR	AR2209	.284"	2.825"	53.5	2,837 fps	53,500 PSI	57.0	2,984 fps	62,800 PSI
	AR2213SC	.284"	2.825"	58.0	2,823 fps	52,800 PSI	61.5	2,987 fps	63,000 PSI
	AR2217	.284"	2.825"	66.0	2,873 fps	53,500 PSI	68.0C	2,967 fps	59,300 PSI
154 GR. HDY SP	AR2209	.284"	2.800"	53.0	2,805 fps	54,500 PSI	56.5	2,947 fps	62,900 PSI
	AR2213SC	.284"	2.800"	58.0	2,824 fps	55,000 PSI	61.5	2,947 fps	62,700 PSI
	AR2217	.284"	2.800"	65.0	2,866 fps	55,700 PSI	68.0C	2,960 fps	61,900 PSI
160 GR. NOS PART	AR2209	.284"	2.825"	53.0	2,774 fps	55,200 PSI	56.5	2,914 fps	63,100 PSI
	AR2213SC	.284"	2.825"	57.0	2,730 fps	53,800 PSI	60.5	2,900 fps	62,600 PSI
	AR2217	.284"	2.825"	63.0	2,772 fps	53,600 PSI	67.0C	2,931 fps	63,300 PSI
162 GR. HDY SPBT	AR2209	.284"	2.825"	52.0	2,760 fps	54,700 PSI	55.5	2,879 fps	62,500 PSI
	AR2213SC	.284"	2.825"	56.5	2,751 fps	55,100 PSI	60.0	2,887 fps	63,100 PSI
	AR2217	.284"	2.825"	64.0	2,793 fps	54,400 PSI	67.0C	2,902 fps	60,900 PSI
168 GR. SIE HPBT	AR2209	.284"	2.825"	51.0	2,666 fps	51,800 PSI	56.0	2,855 fps	62,900 PSI
	AR2213SC	.284"	2.825"	56.0	2,682 fps	52,400 PSI	60.5	2,848 fps	62,800 PSI
	AR2217	.284"	2.825"	64.0	2,770 fps	55,100 PSI	67.0C	2,874 fps	61,200 PSI
175 GR. HDY SP	AR2209	.284"	2.825"	50.0	2,619 fps	53,900 PSI	54.5	2,775 fps	63,100 PSI
	AR2213SC	.284"	2.825"	54.0	2,627 fps	54,300 PSI	58.0	2,760 fps	62,900 PSI
	AR2217	.284"	2.825"	61.0	2,658 fps	54,500 PSI	65.5C	2,817 fps	62,800 PSI
	AR2225	.284"	2.825"	62.0	2,686 fps	51,000 PSI	66.0C	2,863 fps	62,700 PSI
7mm Winchester Short Magnum				Case: Winchester Twist: 1:9.5" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.096"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. BAR XFB	AR2206H	.284"	2.725"	54.0	3,442 fps	56,100 PSI	57.5	3,590 fps	62,500 PSI
	AR2208	.284"	2.725"	56.0	3,392 fps	54,100 PSI	60.5	3,588 fps	62,400 PSI
	AR2209	.284"	2.725"	65.0	3,388 fps	51,800 PSI	70.0	3,647 fps	63,200 PSI
110 GR. SPR TNT HP	Bench Mark 8208	.284"	2.830"	53.3	3,283 fps	55,200 PSI	56.7	3,435 fps	63,400 PSI
	AR2206H	.284"	2.830"	53.0	3,229 fps	52,500 PSI	57.0	3,417 fps	62,300 PSI
	AR2208	.284"	2.830"	56.0	3,320 fps	56,200 PSI	60.0	3,458 fps	62,500 PSI
	AR2209	.284"	2.830"	65.0	3,323 fps	52,600 PSI	70.0	3,553 fps	63,300 PSI
	AR2213SC	.284"	2.830"	68.0	3,225 fps	51,300 PSI	73.0	3,465 fps	62,600 PSI
115 GR. SPR HP	Bench Mark 8208	.284"	2.770"	50.8	3,147 fps	54,400 PSI	54.0	3,298 fps	62,700 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

7mm Winchester Short Magnum				Case: Winchester Twist: 1:9.5" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.096"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.284"	2.770"	51.0	3,143 fps	54,700 PSI	55.0	3,309 fps	62,700 PSI
	AR2208	.284"	2.770"	54.0	3,220 fps	57,000 PSI	57.5	3,360 fps	63,800 PSI
	AR2209	.284"	2.770"	62.0	3,278 fps	56,400 PSI	66.5	3,441 fps	63,500 PSI
	AR2213SC	.284"	2.770"	65.0	3,179 fps	53,700 PSI	70.0	3,372 fps	62,900 PSI
120 GR. HDY V-MAX	Bench Mark 8208	.284"	2.825"	49.2	3,052 fps	54,800 PSI	52.3	3,202 fps	62,000 PSI
	AR2206H	.284"	2.825"	50.0	3,059 fps	51,600 PSI	54.0	3,262 fps	62,500 PSI
	AR2208	.284"	2.825"	53.0	3,155 fps	56,300 PSI	57.0	3,311 fps	63,500 PSI
	AR2209	.284"	2.825"	61.0	3,206 fps	54,800 PSI	65.5	3,387 fps	63,500 PSI
	AR2213SC	.284"	2.825"	65.0	3,159 fps	55,100 PSI	69.5	3,335 fps	63,400 PSI
130 GR. SIE HPBT	Bench Mark 8208	.284"	2.860"	48.7	2,972 fps	55,500 PSI	51.8	3,109 fps	63,000 PSI
	AR2206H	.284"	2.860"	49.0	2,969 fps	54,500 PSI	53.0	3,136 fps	63,000 PSI
	AR2208	.284"	2.860"	51.5	3,029 fps	56,200 PSI	55.2	3,183 fps	64,000 PSI
	AR2209	.284"	2.860"	57.0	3,048 fps	54,500 PSI	61.0	3,213 fps	62,800 PSI
	AR2213SC	.284"	2.860"	62.0	3,041 fps	55,000 PSI	66.0	3,202 fps	63,200 PSI
	AR2217	.284"	2.860"	67.0	3,018 fps	52,300 PSI	72.0C	3,208 fps	61,600 PSI
140 GR. NOS PART	Bench Mark 8208	.284"	2.850"	48.6	2,895 fps	55,700 PSI	51.7	3,026 fps	62,900 PSI
	AR2206H	.284"	2.850"	49.0	2,873 fps	54,100 PSI	52.3	3,024 fps	63,000 PSI
	AR2208	.284"	2.850"	51.0	2,909 fps	54,100 PSI	54.5	3,063 fps	62,600 PSI
	AR2209	.284"	2.850"	58.0	2,979 fps	53,700 PSI	61.5	3,133 fps	61,900 PSI
	AR2213SC	.284"	2.850"	62.0	2,957 fps	53,600 PSI	66.0	3,116 fps	62,000 PSI
	AR2217	.284"	2.850"	69.0	2,995 fps	53,400 PSI	72.0C	3,091 fps	59,000 PSI
	AR2225	.284"	2.850"	69.0	2,888 fps	47,100 PSI	72.0C	3,046 fps	54,300 PSI
145 GR. SPR BTSP	Bench Mark 8208	.284"	2.860"	47.4	2,761 fps	55,100 PSI	50.4	2,885 fps	62,400 PSI
	AR2206H	.284"	2.860"	47.0	2,779 fps	55,100 PSI	50.5	2,922 fps	62,300 PSI
	AR2208	.284"	2.860"	50.0	2,872 fps	57,100 PSI	53.3	3,001 fps	64,000 PSI
	AR2209	.284"	2.860"	55.0	2,898 fps	55,700 PSI	58.7	3,040 fps	62,600 PSI
	AR2213SC	.284"	2.860"	59.0	2,890 fps	55,800 PSI	63.0	3,044 fps	63,400 PSI
	AR2217	.284"	2.860"	65.0	2,904 fps	54,000 PSI	70.0C	3,082 fps	62,900 PSI
150 GR. WIN SP	Bench Mark 8208	.284"	2.850"	47.9	2,803 fps	55,500 PSI	51.0	2,922 fps	62,200 PSI
	AR2206H	.284"	2.840"	48.0	2,782 fps	54,000 PSI	51.5	2,930 fps	62,300 PSI
	AR2208	.284"	2.840"	51.0	2,852 fps	55,700 PSI	55.0	3,000 fps	63,400 PSI
	AR2209	.284"	2.840"	59.0	2,923 fps	54,600 PSI	63.0	3,080 fps	62,900 PSI
	AR2213SC	.284"	2.840"	63.0	2,902 fps	53,700 PSI	67.3	3,066 fps	62,500 PSI
	AR2217	.284"	2.840"	68.0	2,899 fps	51,300 PSI	72.0C	3,031 fps	58,600 PSI
	AR2225	.284"	2.840"	68.0	2,824 fps	45,600 PSI	72.0C	2,987 fps	53,000 PSI
154 GR. HDY SP	Bench Mark 8208	.284"	2.860"	46.2	2,683 fps	54,200 PSI	49.7	2,824 fps	63,200 PSI
	AR2206H	.284"	2.860"	46.0	2,658 fps	55,200 PSI	49.5	2,799 fps	63,000 PSI
	AR2208	.284"	2.860"	48.0	2,705 fps	55,000 PSI	52.0	2,854 fps	62,800 PSI
	AR2209	.284"	2.860"	54.0	2,775 fps	54,500 PSI	57.7	2,920 fps	62,600 PSI
	AR2213SC	.284"	2.860"	58.0	2,779 fps	54,100 PSI	62.5	2,942 fps	62,900 PSI
	AR2217	.284"	2.860"	64.0	2,831 fps	55,100 PSI	68.5C	2,975 fps	62,500 PSI
	AR2225	.284"	2.860"	66.0	2,833 fps	50,000 PSI	71.0C	3,040 fps	61,700 PSI
160 GR. SFT SP	AR2206H	.284"	2.850"	46.0	2,614 fps	52,500 PSI	49.0	2,762 fps	62,600 PSI
	AR2208	.284"	2.850"	48.0	2,676 fps	54,100 PSI	51.3	2,823 fps	62,100 PSI
	AR2209	.284"	2.850"	56.0	2,782 fps	54,600 PSI	59.5	2,918 fps	62,200 PSI

RIFLE DATA

7mm Winchester Short Magnum				Case: Winchester Twist: 1:9.5" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.096"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
162 GR. HDY BTSP	AR2213SC	.284"	2.850"	59.0	2,757 fps	54,200 PSI	63.5	2,921 fps	62,600 PSI
	AR2217	.284"	2.850"	65.0	2,801 fps	54,300 PSI	69.5C	2,956 fps	62,800 PSI
	AR2225	.284"	2.850"	66.0	2,793 fps	51,200 PSI	70.0C	2,958 fps	59,800 PSI
	AR2206H	.284"	2.860"	46.0	2,645 fps	54,800 PSI	49.0	2,773 fps	62,700 PSI
	AR2208	.284"	2.860"	48.0	2,691 fps	54,900 PSI	51.5	2,830 fps	62,900 PSI
	AR2209	.284"	2.860"	54.0	2,759 fps	53,700 PSI	58.0	2,909 fps	62,900 PSI
168 GR. SIE HPBT	AR2213SC	.284"	2.860"	58.0	2,772 fps	55,500 PSI	62.0	2,915 fps	62,800 PSI
	AR2217	.284"	2.860"	64.0	2,816 fps	55,600 PSI	69.0C	2,969 fps	63,400 PSI
	AR2225	.284"	2.860"	66.0	2,836 fps	53,300 PSI	70.5C	3,007 fps	62,500 PSI
	AR2206H	.284"	2.850"	46.0	2,615 fps	55,000 PSI	48.7	2,732 fps	62,600 PSI
	AR2208	.284"	2.850"	48.0	2,666 fps	55,100 PSI	51.0	2,788 fps	63,200 PSI
	AR2209	.284"	2.850"	55.0	2,747 fps	55,900 PSI	58.5	2,865 fps	62,300 PSI
175 GR. SPR MAG TIP	AR2213SC	.284"	2.850"	59.0	2,759 fps	56,200 PSI	63.0	2,892 fps	63,400 PSI
	AR2217	.284"	2.850"	65.0	2,759 fps	54,000 PSI	69.0C	2,907 fps	61,600 PSI
	AR2225	.284"	2.850"	66.0	2,757 fps	50,900 PSI	70.0C	2,921 fps	59,500 PSI
	AR2209	.284"	2.760"	49.0	2,545 fps	55,500 PSI	52.5	2,672 fps	62,200 PSI
7 x 61mm Sharp & Hart				Case: Twist: - Primer:			Barrel length: 24" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
120 GR.	AR2206	-	-	-	-	-	54.5	3,250 fps	-
	AR2208	-	-	-	-	-	57.5	3,250 fps	-
	AR2209	-	-	-	-	-	64.0	3,250 fps	-
139-140 GR.	AR2206	-	-	-	-	-	53.0	3,100 fps	-
	AR2208	-	-	-	-	-	56.0	3,100 fps	-
	AR2209	-	-	-	-	-	62.5	3,100 fps	-
150 GR.	AR2206	-	-	-	-	-	52.0	3,000 fps	-
	AR2208	-	-	-	-	-	55.0	3,000 fps	-
	AR2209	-	-	-	-	-	61.5	3,000 fps	-
160-162 GR.	AR2206	-	-	-	-	-	51.0	2,800 fps	-
	AR2208	-	-	-	-	-	54.0	2,800 fps	-
	AR2209	-	-	-	-	-	60.5	2,800 fps	-
175 GR.	AR2208	-	-	-	-	-	52.0	2,700 fps	-
	AR2209	-	-	-	-	-	59.0	2,700 fps	-

RIFLE DATA

7mm Remington Magnum				Case: Winchester Twist: 1:9.5" Primer: Winchester LR			Barrel length: 24" Trim length: 2.490"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SIE HP	AR2208	.284"	3.150"	53.0	3,193 fps	39,600 CUP	59.0	3,487 fps	49,800 CUP
	AR2209	.284"	3.150"	65.0	3,334 fps	44,800 CUP	69.0	3,494 fps	49,600 CUP
	AR2213SC	.284"	3.150"	71.0	3,316 fps	43,300 CUP	75.0	3,499 fps	50,300 CUP
110 GR. SPR HP	AR2208	.284"	3.250"	54.0	3,174 fps	44,600 CUP	58.5	3,356 fps	50,300 CUP
	AR2209	.284"	3.250"	65.0	3,233 fps	44,700 CUP	68.5	3,357 fps	49,500 CUP
	AR2213SC	.284"	3.250"	68.0	3,213 fps	44,000 CUP	73.0	3,367 fps	49,700 CUP
115 GR. SPR HP	AR2208	.284"	3.200"	53.0	3,068 fps	44,800 CUP	56.5	3,245 fps	49,800 CUP
	AR2209	.284"	3.200"	62.0	3,089 fps	43,800 CUP	66.0	3,281 fps	50,300 CUP
	AR2213SC	.284"	3.200"	65.0	3,060 fps	44,200 CUP	69.7	3,257 fps	50,600 CUP
120 GR. HDY SP	AR2208	.284"	3.230"	53.0	3,021 fps	45,200 CUP	57.0	3,218 fps	50,900 CUP
	AR2209	.284"	3.230"	62.0	3,106 fps	44,700 CUP	65.0	3,226 fps	50,100 CUP
	AR2213SC	.284"	3.230"	65.0	3,095 fps	45,800 CUP	68.5	3,236 fps	50,600 CUP
130 GR. SPR SP	AR2208	.284"	3.185"	51.0	2,877 fps	45,700 CUP	54.0	2,998 fps	49,400 CUP
	AR2209	.284"	3.185"	58.0	2,953 fps	45,100 CUP	61.5	3,082 fps	50,800 CUP
	AR2213SC	.284"	3.185"	63.0	2,952 fps	46,300 CUP	66.0	3,051 fps	50,200 CUP
139 GR. HDY GMX	AR2209	.284"	3.290"	56.1	2,834 fps	45,300 PSI	59.7	3,007 fps	57,800 PSI
	AR2213SC	.284"	3.290"	64.5	2,878 fps	50,200 PSI	68.8	3,054 fps	58,100 PSI
	AR2217	.284"	3.290"	67.5	2,847 fps	46,300 PSI	73.0C	3,065 fps	56,000 PSI
	AR2225	.284"	3.290"	68.0	2,869 fps	45,500 PSI	74.0C	3,128 fps	58,400 PSI
140 GR. NOS PART	Trail Boss	.284"	3.250"	17.2	1,405 fps	21,400 PSI	24.5	1,724 fps	31,000 PSI
	AR2209	.284"	3.250"	56.0	2,808 fps	45,500 CUP	59.0	2,927 fps	50,000 CUP
	AR2213SC	.284"	3.250"	61.0	2,841 fps	46,300 CUP	64.0	2,950 fps	50,200 CUP
	AR2217	.284"	3.250"	67.0	2,934 fps	46,200 CUP	70.0	3,036 fps	50,600 CUP
	AR2225	.284"	3.250"	71.0	2,955 fps	46,100 CUP	75.0C	3,107 fps	49,400 CUP
150 GR. BAR TTSX BT	AR2209	.284"	3.225"	57.9	2,836 fps	50,800 PSI	62.5	3,041 fps	59,800 PSI
	AR2213SC	.284"	3.225"	62.7	2,852 fps	50,600 PSI	68.0	3,080 fps	60,200 PSI
	AR2217	.284"	3.225"	67.2	2,847 fps	49,200 PSI	73.8	3,083 fps	59,100 PSI
	AR2225	.284"	3.225"	66.9	2,895 fps	47,900 PSI	73.5C	3,115 fps	57,200 PSI
150 GR. NOS PART	AR2209	.284"	3.270"	55.0	2,781 fps	45,700 CUP	57.0	2,859 fps	50,100 CUP
	AR2213SC	.284"	3.270"	59.0	2,775 fps	45,300 CUP	62.0	2,986 fps	51,100 CUP
	AR2217	.284"	3.270"	65.0	2,835 fps	46,200 CUP	68.0	2,936 fps	49,900 CUP
	AR2225	.284"	3.270"	68.0	2,818 fps	43,300 CUP	72.5C	2,998 fps	50,300 CUP
160 GR. NOS PART	AR2209	.284"	3.290"	53.0	2,651 fps	46,400 CUP	55.5	2,745 fps	49,800 CUP
	AR2213SC	.284"	3.290"	58.0	2,695 fps	46,400 CUP	60.0	2,787 fps	49,800 CUP
	AR2217	.284"	3.290"	63.0	2,729 fps	43,300 CUP	66.0	2,839 fps	49,600 CUP
	AR2225	.284"	3.290"	65.0	2,756 fps	43,200 CUP	69.5C	2,915 fps	49,900 CUP
162 GR. HDY SPBT	AR2209	.284"	3.290"	55.0	2,677 fps	43,400 CUP	58.0	2,799 fps	49,400 CUP
	AR2213SC	.284"	3.290"	60.0	2,731 fps	43,300 CUP	64.0	2,871 fps	49,800 CUP
	AR2217	.284"	3.290"	67.0	2,800 fps	45,400 CUP	70.0	2,905 fps	49,600 CUP
	AR2225	.284"	3.290"	69.0	2,787 fps	43,900 CUP	73.5C	2,963 fps	50,500 CUP
170 GR. SIE RN	AR2209	.284"	3.270"	58.0	2,701 fps	44,600 CUP	60.0	2,767 fps	48,500 CUP
	AR2213SC	.284"	3.270"	63.0	2,749 fps	46,300 CUP	65.0	2,806 fps	48,900 CUP
	AR2217	.284"	3.270"	69.0	2,744 fps	45,600 CUP	71.0	2,806 fps	49,400 CUP
	AR2225	.284"	3.270"	71.0	2,752 fps	44,200 CUP	75.0C	2,899 fps	50,700 CUP
175 GR. NOS PART	AR2209	.284"	3.290"	51.0	2,504 fps	46,200 CUP	54.0	2,617 fps	51,400 CUP

RIFLE DATA

7mm Remington Magnum				Case: Winchester Twist: 1:9.5" Primer: Winchester LR			Barrel length: 24" Trim length: 2.490"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. BER VLD	AR2213SC	.284"	3.290"	55.0	2,532 fps	45,800 CUP	58.0	2,660 fps	50,200 CUP
	AR2217	.284"	3.290"	61.0	2,567 fps	45,000 CUP	64.5	2,692 fps	50,400 CUP
	AR2225	.284"	3.290"	64.0	2,650 fps	45,400 CUP	68.0	2,800 fps	51,200 CUP
	AR2209	.284"	3.290"	52.0	2,553 fps	48,000 PSI	56.0	2,752 fps	59,000 PSI
180 GR. BER VLD	AR2213SC	.284"	3.290"	58.6	2,652 fps	51,800 PSI	64.5	2,830 fps	60,200 PSI
	AR2217	.284"	3.290"	63.2	2,605 fps	46,000 PSI	69.5C	2,884 fps	60,000 PSI
	AR2225	.284"	3.290"	64.4	2,638 fps	46,400 PSI	70.8C	2,914 fps	59,600 PSI
				Case: Remington Twist: 1:10" Primer: Federal 215M			Barrel length: 24" Trim length: 2.539"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
140 GR. SFT SP	Trail Boss	.284"	3.250"	18.5	1,365 fps	22,700 CUP	26.5	1,529 fps	30,500 CUP
	AR2209	.284"	3.250"	64.0	3,046 fps	43,800 CUP	68.5	3,248 fps	54,000 CUP
	AR2213SC	.284"	3.250"	69.0	3,023 fps	43,600 CUP	74.0	3,258 fps	54,000 CUP
	AR2217	.284"	3.250"	75.0	3,104 fps	42,800 CUP	79.0C	3,273 fps	49,900 CUP
150 GR. NOS PART	AR2209	.284"	3.250"	64.0	3,012 fps	45,800 CUP	68.0	3,180 fps	54,000 CUP
	AR2213SC	.284"	3.250"	68.0	2,973 fps	44,800 CUP	72.0	3,152 fps	53,500 CUP
	AR2217	.284"	3.250"	75.0	3,073 fps	45,400 CUP	79.0C	3,223 fps	52,200 CUP
160 GR. BAR TTSX	AR2209	.284"	3.250"	55.0	2,723 fps	48,500 CUP	61.5	2,960 fps	55,300 CUP
	AR2213SC	.284"	3.250"	62.0	2,759 fps	48,300 CUP	69.0C	3,001 fps	55,000 CUP
	AR2217	.284"	3.250"	68.0	2,778 fps	45,600 CUP	75.0C	3,034 fps	54,800 CUP
175 GR. HDY SP	AR2209	.284"	3.350"	60.0	2,755 fps	45,900 CUP	63.7	2,899 fps	53,600 CUP
	AR2213SC	.284"	3.350"	63.0	2,724 fps	43,500 CUP	67.5	2,895 fps	53,400 CUP
	AR2217	.284"	3.350"	70.0	2,844 fps	45,000 CUP	74.7C	3,022 fps	54,000 CUP
180 GR. BER VLD	AR2209	.284"	3.350"	55.4	2,630 fps	44,400 CUP	60.3	2,840 fps	53,900 CUP
	AR2213SC	.284"	3.350"	60.3	2,647 fps	42,800 CUP	66.3	2,877 fps	53,600 CUP
	AR2217	.284"	3.350"	66.3	2,733 fps	44,400 CUP	72.1C	2,939 fps	53,600 CUP
				Case: Federal Twist: 1:10" Primer: Federal 215			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
120 GR. SIE SP	AR2209	.284"	3.585"	69.0	3,185 fps	45,400 CUP	73.0	3,350 fps	52,300 CUP
	AR2213SC	.284"	3.585"	75.0	3,200 fps	46,300 CUP	78.5	3,348 fps	51,900 CUP
	AR2217	.284"	3.585"	82.0	3,255 fps	45,300 CUP	86.0	3,405 fps	51,800 CUP
	AR2225	.284"	3.585"	85.0	3,330 fps	47,900 CUP	89.5C	3,519 fps	54,300 CUP
139 GR. HDY SPBT	AR2209	.284"	3.585"	69.0	3,079 fps	46,700 CUP	71.0	3,183 fps	52,300 CUP
	AR2213SC	.284"	3.585"	72.0	3,018 fps	44,400 CUP	76.5	3,181 fps	51,900 CUP
	AR2217	.284"	3.585"	81.0	3,119 fps	46,400 CUP	85.5	3,284 fps	52,300 CUP
	AR2225	.284"	3.585"	83.0	3,165 fps	47,700 CUP	88.0C	3,347 fps	54,300 CUP
145 GR. SPR SP	AR2213SC	.284"	3.565"	68.0	2,937 fps	47,800 CUP	72.0	3,063 fps	52,300 CUP
	AR2217	.284"	3.565"	74.0	3,023 fps	47,400 CUP	77.0	3,120 fps	52,100 CUP
	AR2225	.284"	3.565"	77.0	3,052 fps	48,000 CUP	81.5C	3,195 fps	53,700 CUP

RIFLE DATA

7mm Shooting Times Westerner				Case: Federal			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.840"		
				Primer: Federal 215					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. BAR TSX	AR2213SC	.284"	3.530"	65.0	2,842 fps	47,100 CUP	70.0	3,022 fps	53,100 CUP
	AR2217	.284"	3.530"	71.0	2,889 fps	45,000 CUP	76.0C	3,038 fps	51,600 CUP
	AR2225	.284"	3.530"	71.0	2,929 fps	46,200 CUP	77.0C	3,140 fps	53,500 CUP
	AR2218	.284"	3.530"	80.0	2,908 fps	46,600 CUP	84.0C	3,005 fps	49,500 CUP
160 GR. SFT SP	AR2213SC	.284"	3.565"	70.0	2,884 fps	45,900 CUP	74.0	3,037 fps	52,300 CUP
	AR2217	.284"	3.565"	76.0	2,930 fps	44,300 CUP	80.7	3,084 fps	51,500 CUP
	AR2225	.284"	3.565"	75.0	2,909 fps	46,700 CUP	80.2	3,056 fps	53,600 CUP
	AR2218	.284"	3.565"	88.0	2,929 fps	46,100 CUP	90.0C	2,970 fps	46,600 CUP
175 GR. NOS PART	AR2217	.284"	3.585"	70.0	2,833 fps	47,700 CUP	74.0	2,944 fps	51,900 CUP
	AR2225	.284"	3.585"	72.0	2,819 fps	48,300 CUP	77.0	2,967 fps	54,200 CUP
	AR2218	.284"	3.585"	85.0	2,851 fps	46,900 CUP	89.0C	2,973 fps	52,300 CUP
180 GR. BER VLD	AR2217	.284"	3.655"	70.0	2,771 fps	48,800 CUP	74.5	2,892 fps	53,300 CUP
	AR2225	.284"	3.655"	69.3	2,760 fps	49,700 CUP	73.8	2,876 fps	53,500 CUP
	AR2218	.284"	3.655"	80.8	2,772 fps	48,800 CUP	86.0C	2,894 fps	52,400 CUP
7mm Remington Ultra Magnum				Case: Remington			Barrel length: 24"		
				Twist: 1:9.5"			Trim length: 2.840"		
				Primer: Remington 9 1/2M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY HP	AR2209	.284"	3.500"	82.0	3,618 fps	55,500 PSI	87.0	3,804 fps	63,300 PSI
	AR2213SC	.284"	3.500"	90.0	3,585 fps	55,900 PSI	95.0	3,754 fps	62,800 PSI
	AR2217	.284"	3.500"	98.0	3,515 fps	52,200 PSI	104.0C	3,750 fps	62,700 PSI
110 GR. SPR TNT HP	AR2209	.284"	3.500"	82.0	3,519 fps	56,000 PSI	86.0	3,675 fps	63,200 PSI
	AR2213SC	.284"	3.500"	88.0	3,431 fps	53,500 PSI	93.5	3,652 fps	63,000 PSI
	AR2217	.284"	3.500"	96.0	3,437 fps	52,100 PSI	102.0	3,676 fps	62,600 PSI
115 GR. SPR HP	AR2209	.284"	3.450"	82.0	3,472 fps	57,600 PSI	85.5	3,592 fps	63,400 PSI
	AR2213SC	.284"	3.450"	87.0	3,364 fps	54,000 PSI	91.5	3,565 fps	62,800 PSI
	AR2217	.284"	3.450"	95.0	3,380 fps	54,500 PSI	101.0	3,589 fps	63,100 PSI
	AR2225	.284"	3.450"	98.0	3,398 fps	54,100 PSI	104.0C	3,683 fps	64,100 PSI
120 GR. NOS BT	AR2209	.284"	3.600"	81.0	3,475 fps	59,700 PSI	83.0	3,552 fps	62,900 PSI
	AR2213SC	.284"	3.600"	85.0	3,344 fps	54,600 PSI	90.0	3,536 fps	63,000 PSI
	AR2217	.284"	3.600"	94.0	3,368 fps	54,600 PSI	99.5	3,572 fps	63,100 PSI
	AR2225	.284"	3.600"	96.0	3,326 fps	52,100 PSI	102.5C	3,601 fps	62,300 PSI
130 GR. BAR XBT	AR2213SC	.284"	3.560"	83.0	3,235 fps	55,600 PSI	88.0	3,412 fps	63,100 PSI
	AR2217	.284"	3.560"	90.0	3,224 fps	53,700 PSI	95.5	3,430 fps	62,900 PSI
	AR2225	.284"	3.560"	93.0	3,223 fps	52,400 PSI	99.5C	3,514 fps	63,600 PSI
	AR2218	.284"	3.560"	102.0	3,289 fps	56,900 PSI	107.0C	3,413 fps	62,300 PSI
140 GR. BAR XBT	AR2213SC	.284"	3.560"	82.0	3,123 fps	56,200 PSI	87.0	3,279 fps	63,100 PSI
	AR2217	.284"	3.560"	90.0	3,196 fps	59,300 PSI	95.0	3,277 fps	62,700 PSI
	AR2225	.284"	3.560"	90.0	3,142 fps	55,200 PSI	96.5C	3,353 fps	62,900 PSI
	AR2218	.284"	3.560"	101.0	3,092 fps	54,200 PSI	107.0C	3,271 fps	62,400 PSI
145 GR. SPR GSSP	AR2213SC	.284"	3.580"	83.0	3,125 fps	55,400 PSI	88.0	3,302 fps	63,400 PSI
	AR2217	.284"	3.580"	91.0	3,157 fps	55,300 PSI	97.0	3,331 fps	63,300 PSI
	AR2225	.284"	3.580"	93.0	3,159 fps	52,800 PSI	99.0	3,388 fps	63,400 PSI
	AR2218	.284"	3.580"	101.0	3,100 fps	53,800 PSI	107.0C	3,319 fps	63,600 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

7mm Remington Ultra Magnum				Case: Remington Twist: 1:9.5" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. SFT SCIR	AR2213SC	.284"	3.600"	82.0	3,146 fps	61,900 PSI	84.0	3,187 fps	63,100 PSI
	AR2217	.284"	3.600"	87.0	3,045 fps	54,400 PSI	92.0	3,230 fps	63,100 PSI
	AR2225	.284"	3.600"	89.0	3,054 fps	53,000 PSI	95.0C	3,299 fps	63,600 PSI
	AR2218	.284"	3.600"	97.0	3,048 fps	55,000 PSI	103.0C	3,222 fps	63,200 PSI
154 GR. HDY SP	AR2217	.284"	3.630"	85.0	3,051 fps	56,700 PSI	90.0	3,192 fps	63,300 PSI
	AR2225	.284"	3.630"	90.0	3,055 fps	53,400 PSI	96.2	3,289 fps	63,900 PSI
	AR2218	.284"	3.630"	94.0	2,989 fps	54,800 PSI	100.0C	3,170 fps	63,100 PSI
160 GR. NOS PART	AR2217	.284"	3.600"	85.0	3,007 fps	56,500 PSI	91.0	3,167 fps	63,500 PSI
	AR2225	.284"	3.600"	88.0	3,003 fps	53,700 PSI	94.0	3,212 fps	62,800 PSI
	AR2218	.284"	3.600"	94.0	2,985 fps	55,600 PSI	100.0	3,144 fps	63,400 PSI
162 GR. HDY SPBT	AR2217	.284"	3.650"	84.0	2,993 fps	55,600 PSI	89.0	3,127 fps	62,500 PSI
	AR2225	.284"	3.650"	89.0	3,009 fps	53,100 PSI	95.0	3,223 fps	62,700 PSI
	AR2218	.284"	3.650"	94.0	2,979 fps	56,000 PSI	100.0	3,119 fps	62,600 PSI
168 GR. SIE HPBT	AR2217	.284"	3.650"	85.0	2,988 fps	57,500 PSI	90.0	3,116 fps	63,500 PSI
	AR2225	.284"	3.650"	89.0	2,986 fps	54,400 PSI	94.0	3,171 fps	63,300 PSI
	AR2218	.284"	3.650"	94.0	2,942 fps	55,600 PSI	100.0	3,118 fps	63,400 PSI
175 GR. SFT SP	AR2217	.284"	3.600"	82.0	2,871 fps	56,700 PSI	87.0	3,021 fps	63,500 PSI
	AR2225	.284"	3.600"	86.0	2,919 fps	57,300 PSI	91.5	3,069 fps	63,400 PSI
	AR2218	.284"	3.600"	91.0	2,888 fps	57,000 PSI	96.0	3,019 fps	63,100 PSI
7.35mm Carcano (1938)				Case: Twist: - Primer:			Barrel length: 21" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
128 GR.	AR2207	-	-	-	-	-	33.0	2,500 fps	-
	AR2206	-	-	-	-	-	37.0	2,500 fps	-
	AR2208	-	-	-	-	-	41.0	2,500 fps	-
150 GR.	AR2206	-	-	-	-	-	35.0	2,450 fps	-
	AR2208	-	-	-	-	-	39.0	2,450 fps	-
30 Carbine (30 M1 Carbine)				Case: Winchester Twist: 1:20" Primer: CCI 400			Barrel length: 20" Trim length: 1.285"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
85 GR. SIE RN	AR2205	.308"	1.625"	14.5	2,054 fps	25,200 CUP	15.5C	2,181 fps	30,700 CUP
100 GR. SPR SP	AR2205	.308"	1.625"	13.0	1,879 fps	28,900 CUP	14.5C	2,026 fps	33,600 CUP
110 GR. HDY JRN	AR2205	.308"	1.680"	13.0	1,826 fps	30,100 CUP	14.5C	2,003 fps	38,800 CUP

RIFLE DATA

300 AAC Blackout				Case: Remington Twist: 1:8" Primer: Remington 7 1/2			Barrel length: 16" Trim length: 1.363"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY V-MAX	Trail Boss	.308"	2.040"	4.5	880 fps	21,900 CUP	6.3	1,046 fps	20,200 CUP
	AR2205	.308"	2.040"	17.6	1,942 fps	36,500 CUP	19.5C	2,130 fps	46,700 CUP
115 GR. BER TGT FB	Trail Boss	.308"	2.050"	4.5	894 fps	23,200 CUP	6.3	1,044 fps	19,900 CUP
	AR2205	.308"	2.050"	17.6	1,934 fps	36,800 CUP	19.5C	2,110 fps	47,000 CUP
125 GR. NOS BT	AR2205	.308"	2.060"	16.5	1,818 fps	38,000 CUP	17.7C	1,965 fps	49,800 CUP
130 GR. SPR HP	AR2205	.308"	2.005"	18.0	1,902 fps	41,900 CUP	19.2	2,008 fps	47,600 CUP
135 GR. SIE HPBT	AR2205	.308"	2.120"	17.1	1,818 fps	39,700 CUP	18.2	1,960 fps	47,600 CUP
175 GR. SIE HPBT	AR2205	.308"	2.215"	15.7	1,639 fps	41,400 CUP	16.7	1,709 fps	48,200 CUP
180 GR. SPR SP	AR2205	.308"	2.210"	15.0	1,497 fps	34,900 CUP	16.4	1,662 fps	47,700 CUP
	AR2207	.308"	2.210"	15.9	1,464 fps	23,500 CUP	16.9C	1,578 fps	29,200 CUP
208 GR. HDY A-MAX	AR2205	.308"	2.260"	-	-	-	10.3	1,073 fps	24,500 CUP
	AR2207	.308"	2.260"	-	-	-	11.2	1,042 fps	18,800 CUP
220 GR. SIE HPBT	AR2205	.308"	2.260"	-	-	-	10.5	1,044 fps	28,800 CUP
	AR2207	.308"	2.260"	-	-	-	11.5	1,068 fps	25,600 CUP
230 GR. BER TACT	AR2205	.308"	2.260"	-	-	-	10.2	1,065 fps	37,100 CUP
30-30 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 2.030"		
NOTE: See Single Action Rifle section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. SPR FP	AR2207	.308"	2.415"	23.0	2,174 fps	27,100 CUP	25.5	2,409 fps	35,900 CUP
	Bench Mark 2	.308"	2.415"	30.5	2,406 fps	36,400 CUP	32.5	2,507 fps	37,800 CUP
	AR2206H	.308"	2.415"	34.0	2,417 fps	28,600 CUP	37.0	2,605 fps	31,100 CUP
	AR2208	.308"	2.415"	34.5	2,365 fps	27,200 CUP	38.0C	2,572 fps	31,900 CUP
130 GR. SPR FP	AR2207	.308"	2.540"	22.5	2,082 fps	29,200 CUP	24.5	2,234 fps	36,400 CUP
	Bench Mark 2	.308"	2.540"	27.7	2,165 fps	33,700 CUP	29.7	2,295 fps	37,100 CUP
	AR2206H	.308"	2.540"	31.5	2,248 fps	27,600 CUP	35.0	2,482 fps	35,300 CUP
	AR2208	.308"	2.540"	32.5	2,312 fps	30,200 CUP	36.0C	2,496 fps	35,700 CUP
140 GR. HDY MFTX	Bench Mark 2	.308"	2.550"	24.0	1,839 fps	26,400 PSI	28.0	2,160 fps	38,800 PSI
	AR2206H	.308"	2.550"	26.0	2,077 fps	36,800 PSI	29.7	2,273 fps	40,300 PSI
	AR2208	.308"	2.550"	27.0	1,986 fps	31,600 PSI	30.5C	2,225 fps	39,900 PSI
150 GR. SIE FN	AR2207	.308"	2.550"	21.6	1,924 fps	26,900 CUP	24.0	2,110 fps	36,800 CUP
	Bench Mark 2	.308"	2.550"	27.0	2,042 fps	32,100 CUP	29.0	2,183 fps	37,200 CUP
	Bench Mark 8208	.308"	2.550"	30.0	2,213 fps	35,000 CUP	32.0	2,316 fps	36,700 CUP
	AR2206H	.308"	2.550"	30.5	2,138 fps	27,900 CUP	34.0	2,390 fps	36,700 CUP
	AR2208	.308"	2.550"	31.0	2,172 fps	31,100 CUP	34.5	2,349 fps	36,200 CUP
160 GR. HDY FTX	Bench Mark 2	.308"	2.550"	26.1	1,933 fps	31,000 CUP	27.8	2,045 fps	35,400 CUP
	Bench Mark 8208	.308"	2.550"	27.0	2,045 fps	33,900 CUP	30.0	2,207 fps	37,000 CUP
	AR2206H	.308"	2.550"	27.8	2,045 fps	31,100 CUP	30.0	2,200 fps	35,500 CUP
	AR2208	.308"	2.550"	29.8	2,081 fps	31,700 CUP	32.4	2,235 fps	35,900 CUP
170 GR. SIE FP	AR2207	.308"	2.550"	20.5	1,764 fps	27,300 CUP	22.5	1,918 fps	32,600 CUP
	Bench Mark 2	.308"	2.550"	25.3	1,894 fps	32,200 CUP	27.0	2,001 fps	36,100 CUP
	Bench Mark 8208	.308"	2.550"	27.8	2,052 fps	36,400 CUP	30.9	2,181 fps	37,500 CUP

RIFLE DATA

30-30 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 2.030"		
NOTE: See Single Action Rifle section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2206H	.308"	2.550"	27.5	1,947 fps	28,200 CUP	30.5	2,138 fps	35,200 CUP
	AR2208	.308"	2.550"	29.5	1,976 fps	30,200 CUP	33.0	2,168 fps	36,500 CUP
30 AR Remington				Case: Remington Twist: 1:10" Primer: Remington 7 1/2			Barrel length: 24" Trim length: 1.520"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY V-MAX	AR2207	.308"	2.240"	32.0	2,794 fps	37,700 PSI	35.5C	3,076 fps	50,800 PSI
115 GR. BER TGT FB	AR2207	.308"	2.240"	32.0	2,717 fps	35,900 PSI	36.0	3,035 fps	50,900 PSI
	AR2219	.308"	2.240"	37.0	2,798 fps	39,100 PSI	40.0C	3,016 fps	50,200 PSI
125 GR. NOS BT	AR2219	.308"	2.240"	34.5	2,635 fps	38,900 PSI	38.2C	2,903 fps	53,500 PSI
	Bench Mark 2	.308"	2.240"	37.0	2,740 fps	47,000 PSI	40.0C	2,931 fps	51,400 PSI
	Bench Mark 8208	.308"	2.240"	37.0	2,676 fps	37,600 PSI	40.0C	2,875 fps	46,400 PSI
130 GR. BAR TTSX BT	AR2219	.308"	2.230"	34.0	2,557 fps	38,600 PSI	37.5C	2,818 fps	52,800 PSI
	Bench Mark 2	.308"	2.230"	36.0	2,622 fps	39,400 PSI	39.2C	2,866 fps	52,900 PSI
	Bench Mark 8208	.308"	2.230"	36.0	2,561 fps	36,500 PSI	39.0C	2,826 fps	48,600 PSI
135 GR. SIE HPBT	AR2219	.308"	2.250"	34.0	2,526 fps	36,900 PSI	37.7C	2,814 fps	52,700 PSI
	Bench Mark 2	.308"	2.250"	36.0	2,605 fps	38,800 PSI	39.5C	2,859 fps	51,800 PSI
	Bench Mark 8208	.308"	2.250"	36.0	2,557 fps	34,600 PSI	39.0C	2,790 fps	46,700 PSI
150 GR. NOS BT	AR2219	.308"	2.250"	32.5	2,393 fps	38,900 PSI	35.5C	2,614 fps	51,700 PSI
	Bench Mark 2	.308"	2.250"	34.5	2,485 fps	41,300 PSI	37.5C	2,675 fps	52,100 PSI
	Bench Mark 8208	.308"	2.250"	34.0	2,385 fps	34,700 PSI	38.0C	2,692 fps	51,200 PSI
	AR2206H	.308"	2.250"	34.0	2,355 fps	35,200 PSI	38.0C	2,647 fps	51,000 PSI
160 GR. HDY FTX ME	AR2219	.308"	2.200"	31.0	2,260 fps	36,600 PSI	34.3C	2,515 fps	51,100 PSI
	Bench Mark 2	.308"	2.200"	33.0	2,353 fps	38,500 PSI	36.0C	2,566 fps	50,900 PSI
	Bench Mark 8208	.308"	2.200"	33.0	2,315 fps	35,600 PSI	36.0C	2,535 fps	47,300 PSI
30-40 Krag				Case: Winchester Twist: 1:10" Primer: CCI 200			Barrel length: 24" Trim length: 2.304"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. HDY SP	AR2205	.308"	2.880"	13.0	1,433 fps	-	16.0	1,706 fps	-
	AR2207	.308"	2.880"	30.0	2,604 fps	-	34.0	2,886 fps	-
	AR2219	.308"	2.880"	39.0	2,542 fps	-	43.0	2,898 fps	-
	AR2206H	.308"	2.880"	42.0	2,707 fps	-	44.0	2,835 fps	-
	AR2209	.308"	2.880"	48.0	2,300 fps	-	51.0	2,492 fps	-
110 GR. SIE HP	AR2207	.308"	2.875"	30.0	2,417 fps	-	34.0	2,807 fps	-
	AR2219	.308"	2.875"	39.0	2,497 fps	-	43.0	2,841 fps	-
130 GR. SPR HP	AR2207	.308"	2.865"	29.0	2,224 fps	-	33.0	2,565 fps	-
	AR2219	.308"	2.865"	38.0	2,458 fps	-	42.0	2,698 fps	-
	AR2209	.308"	2.865"	48.0	2,330 fps	-	51.0	2,535 fps	-
150 GR. NOS PART	AR2207	.308"	3.090"	28.0	2,220 fps	-	32.0	2,366 fps	-

RIFLE DATA

30-40 Krag				Case: Winchester Twist: 1:10" Primer: CCI 200			Barrel length: 24" Trim length: 2.304"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2219	.308"	3.090"	36.0	2,369 fps	-	40.0	2,518 fps	-
	AR2206H	.308"	3.090"	38.5	2,410 fps	-	42.0	2,575 fps	-
	AR2209	.308"	3.090"	46.0	2,198 fps	-	49.0	2,388 fps	-
	AR2213SC	.308"	3.090"	45.0	2,129 fps	-	49.0	2,306 fps	-
165 GR. HDY BTSP	AR2219	.308"	3.105"	35.0	2,228 fps	-	39.0	2,402 fps	-
	AR2209	.308"	3.105"	45.0	2,115 fps	-	48.0	2,242 fps	-
	AR2213SC	.308"	3.105"	44.0	1,967 fps	-	48.0	2,176 fps	-
180 GR. SPR GS SP	AR2219	.308"	3.090"	33.0	2,111 fps	-	37.0	2,250 fps	-
	AR2206H	.308"	3.090"	35.0	2,171 fps	-	38.0	2,265 fps	-
	AR2209	.308"	3.090"	43.0	2,006 fps	-	46.0	2,110 fps	-
200 GR. SIE SPBT	AR2219	.308"	3.090"	32.0	1,915 fps	-	35.0	2,075 fps	-
	AR2209	.308"	3.090"	42.0	1,929 fps	-	44.0	2,018 fps	-
220 GR. HDY RN	AR2219	.308"	3.080"	30.0	1,852 fps	-	33.0	1,969 fps	-
	AR2209	.308"	3.080"	40.0	1,874 fps	-	42.0	1,947 fps	-
7.5 x 55mm Swiss				Case: Norma Twist: 1:10.6" Primer: Winchester LR			Barrel length: 31" Trim length: 2.175"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. SIE SP	AR2206H	.308"	2.800"	41.0	2,639 fps	-	43.0	2,762 fps	-
	AR2209	.308"	2.800"	47.0	2,565 fps	-	51.0	2,839 fps	-
	AR2213SC	.308"	2.800"	49.0	2,639 fps	-	52.0	2,811 fps	-
150 GR. HDY SP	AR2206H	.308"	2.790"	40.0	2,484 fps	-	42.0	2,578 fps	-
	AR2209	.308"	2.790"	45.0	2,420 fps	-	49.0	2,610 fps	-
	AR2213SC	.308"	2.790"	47.0	2,493 fps	-	51.0	2,659 fps	-
168 GR. SIE HPBT	AR2206H	.308"	3.060"	39.0	2,388 fps	-	41.0	2,432 fps	-
	AR2209	.308"	3.060"	44.0	2,379 fps	-	48.0	2,524 fps	-
	AR2213SC	.308"	3.060"	45.0	2,477 fps	-	49.0	2,578 fps	-
180 GR. HDY SP	AR2206H	.308"	2.900"	37.0	2,201 fps	-	39.0	2,296 fps	-
	AR2209	.308"	2.900"	42.0	2,250 fps	-	46.0	2,566 fps	-
	AR2213SC	.308"	2.900"	43.0	2,304 fps	-	47.0	2,424 fps	-
300 Savage				Case: Remington Twist: 1:12" Primer: Remington 9 1/2			Barrel length: 22" Trim length: 1.861"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SPR RN SP	AR2207	.308"	2.475"	34.0	2,914 fps	-	37.0	3,103 fps	-
	AR2206H	.308"	2.475"	41.0	2,819 fps	-	43.0	3,002 fps	-
110 GR. HDY SP	AR2207	.308"	2.450"	34.0	2,742 fps	-	37.0	2,978 fps	-
	AR2206H	.308"	2.450"	39.5	2,669 fps	-	43.0	2,944 fps	-
130 GR. HDY SP	AR2207	.308"	2.520"	33.0	2,624 fps	-	36.0	2,837 fps	-
	AR2206H	.308"	2.520"	39.5	2,324 fps	-	43.0	2,698 fps	-
150 GR. NOS PART	AR2206H	.308"	2.520"	37.0	2,187 fps	-	40.0	2,408 fps	-
165 GR. SIE SPBT	AR2206H	.308"	2.600"	35.0	2,164 fps	-	38.0	2,341 fps	-

RIFLE DATA

300 Savage				Case: Remington Twist: 1:12" Primer: Remington 9 1/2			Barrel length: 22" Trim length: 1.861"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. HDY SP	AR2206H	.308"	2.600"	34.0	2,081 fps	-	37.0	2,130 fps	-
200 GR. SPR SP	AR2206H	.308"	2.550"	32.0	1,973 fps	-	35.0	2,089 fps	-
307 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 20" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. SPR HP	AR2219	.308"	2.390"	41.0	2,814 fps	-	44.0	3,000 fps	-
110 GR.	AR2206	-	-	41.0	2,730 fps	-	44.5	2,965 fps	-
110 GR. SPR HP	AR2206H	.308"	2.390"	42.0	2,724 fps	-	45.0	2,930 fps	-
	AR2209	.308"	2.390"	47.0	2,320 fps	-	50.0	2,589 fps	-
	AR2213SC	.308"	2.390"	48.0	2,340 fps	-	50.0	2,451 fps	-
125 GR. SPR FP	AR2219	.308"	2.520"	39.0	2,481 fps	-	42.0	2,669 fps	-
125 GR.	AR2206	-	-	39.0	2,500 fps	-	42.5	2,725 fps	-
125 GR. SPR FP	AR2206H	.308"	2.520"	40.0	2,540 fps	-	43.0	2,762 fps	-
	AR2209	.308"	2.520"	47.0	2,380 fps	-	50.0	2,522 fps	-
	AR2213SC	.308"	2.520"	48.0	2,269 fps	-	50.0	2,400 fps	-
150 GR. HDY RN	AR2219	.308"	2.520"	38.0	2,319 fps	-	41.0	2,513 fps	-
150 GR.	AR2206	-	-	38.5	2,370 fps	-	41.5	2,555 fps	-
150 GR. HDY RN	AR2206H	.308"	2.520"	39.0	2,402 fps	-	42.0	2,604 fps	-
	AR2209	.308"	2.520"	46.0	2,292 fps	-	48.0	2,453 fps	-
	AR2213SC	.308"	2.520"	47.0	2,154 fps	-	49.0	2,349 fps	-
170 GR. HDY FP	AR2219	.308"	2.520"	35.0	2,234 fps	-	38.0	2,418 fps	-
170 GR.	AR2206	-	-	35.5	2,185 fps	-	39.0	2,400 fps	-
170 GR. HDY FP	AR2206H	.308"	2.520"	37.0	2,314 fps	-	40.0	2,474 fps	-
	AR2209	.308"	2.520"	45.0	2,210 fps	-	47.0	2,380 fps	-
180 GR. HDY RN	AR2219	.308"	2.730"	34.0	2,169 fps	-	37.0	2,359 fps	-
	AR2206H	.308"	2.730"	36.0	2,227 fps	-	39.0	2,373 fps	-
	AR2209	.308"	2.730"	45.0	2,290 fps	-	47.0	2,416 fps	-
308 Marlin Express				Case: Hornady Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 1.910"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. SIE HP FN	AR2219	.308"	2.300"	34.0	2,555 fps	41,400 PSI	37.0	2,704 fps	46,200 PSI
	Bench Mark 2	.308"	2.300"	34.0	2,504 fps	39,500 PSI	37.6	2,680 fps	45,200 PSI
	Bench Mark 8208	.308"	2.300"	37.0	2,682 fps	39,200 PSI	41.0	2,868 fps	44,900 PSI
	AR2206H	.308"	2.300"	38.0	2,527 fps	35,900 PSI	42.0	2,788 fps	45,000 PSI
	AR2208	.308"	2.300"	39.0	2,525 fps	37,500 PSI	42.3C	2,700 fps	42,800 PSI
130 GR. SPR FP	AR2219	.308"	2.420"	32.0	2,388 fps	36,500 PSI	35.3	2,617 fps	45,800 PSI
	Bench Mark 2	.308"	2.420"	33.0	2,428 fps	38,800 PSI	36.5	2,635 fps	46,300 PSI
	Bench Mark 8208	.308"	2.420"	36.0	2,627 fps	40,700 PSI	40.0	2,808 fps	45,700 PSI
	AR2206H	.308"	2.420"	38.0	2,551 fps	38,600 PSI	41.7	2,762 fps	46,000 PSI
	AR2208	.308"	2.420"	39.0	2,502 fps	37,500 PSI	42.5	2,730 fps	46,400 PSI

RIFLE DATA

308 Marlin Express				Case: Homady Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 1.910"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. BAR TSX FN	Bench Mark 8208	.308"	2.350"	34.0	2,403 fps	40,700 PSI	37.4C	2,558 fps	46,100 PSI
	AR2206H	.308"	2.350"	35.0	2,279 fps	38,800 PSI	38.3C	2,498 fps	46,800 PSI
	AR2208	.308"	2.350"	36.0	2,268 fps	39,500 PSI	39.5C	2,458 fps	46,500 PSI
150 GR. HDY RN	Bench Mark 8208	.308"	2.430"	36.0	2,537 fps	42,600 PSI	39.5	2,665 fps	46,300 PSI
	AR2206H	.308"	2.430"	37.0	2,443 fps	40,000 PSI	40.5	2,607 fps	45,900 PSI
	AR2208	.308"	2.430"	38.0	2,405 fps	39,100 PSI	41.5C	2,572 fps	46,100 PSI
160 GR. HDY FTX ME	Bench Mark 8208	.308"	2.590"	35.0	2,456 fps	42,500 PSI	37.8	2,570 fps	46,700 PSI
	AR2206H	.308"	2.590"	34.8	2,442 fps	40,900 PSI	37.0	2,555 fps	46,800 PSI
	AR2208	.308"	2.590"	36.4	2,361 fps	38,900 PSI	39.6C	2,547 fps	46,800 PSI
170 GR. HDY FP	Bench Mark 8208	.308"	2.400"	33.0	2,288 fps	38,300 PSI	37.0	2,473 fps	46,600 PSI
	AR2206H	.308"	2.400"	35.0	2,289 fps	41,000 PSI	38.6C	2,439 fps	46,300 PSI
	AR2208	.308"	2.400"	36.0	2,255 fps	40,500 PSI	39.3C	2,394 fps	46,300 PSI
30 TC				Case: Homady Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 1.910"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. NOS BT	AR2207	.308"	2.640"	34.0	2,800 fps	46,500 PSI	38.4	3,032 fps	58,500 PSI
	AR2219	.308"	2.640"	40.0	2,925 fps	52,000 PSI	44.8	3,137 fps	60,600 PSI
	Bench Mark 2	.308"	2.640"	41.0	2,860 fps	43,500 PSI	46.0	3,149 fps	59,300 PSI
	AR2206H	.308"	2.640"	43.0	2,895 fps	42,700 PSI	47.8C	3,177 fps	57,700 PSI
130 GR. BAR TSX BT	AR2219	.308"	2.640"	40.0	2,869 fps	49,500 PSI	44.5	3,089 fps	60,100 PSI
	Bench Mark 2	.308"	2.640"	41.0	2,841 fps	44,800 PSI	45.7C	3,104 fps	59,600 PSI
	AR2206H	.308"	2.640"	43.0	2,875 fps	44,800 PSI	47.5C	3,133 fps	59,200 PSI
	AR2208	.308"	2.640"	44.0	2,839 fps	45,200 PSI	48.0C	3,051 fps	55,900 PSI
135 GR. SIE HPBT	AR2219	.308"	2.640"	39.0	2,816 fps	50,100 PSI	43.0	3,002 fps	59,300 PSI
	Bench Mark 2	.308"	2.640"	40.0	2,758 fps	42,200 PSI	45.0C	3,057 fps	59,900 PSI
	Bench Mark 8208	.308"	2.640"	42.0	2,893 fps	46,500 PSI	45.3	3,095 fps	59,700 PSI
	AR2206H	.308"	2.640"	42.0	2,800 fps	42,900 PSI	47.3C	3,106 fps	59,300 PSI
	AR2208	.308"	2.640"	44.0	2,814 fps	45,600 PSI	49.0C	3,081 fps	60,200 PSI
150 GR. HDY IB	AR2219	.308"	2.640"	38.0	2,683 fps	53,600 PSI	42.5C	2,857 fps	60,700 PSI
	Bench Mark 2	.308"	2.640"	38.0	2,596 fps	45,700 PSI	42.5C	2,831 fps	59,400 PSI
	Bench Mark 8208	.308"	2.640"	39.0	2,646 fps	43,400 PSI	43.7	2,915 fps	60,000 PSI
	AR2206H	.308"	2.640"	41.0	2,652 fps	44,300 PSI	45.5C	2,901 fps	58,900 PSI
	AR2208	.308"	2.640"	42.0	2,631 fps	45,700 PSI	45.8C	2,830 fps	56,100 PSI
155 GR. NOS HPBT	AR2219	.308"	2.640"	36.0	2,590 fps	49,400 PSI	40.5	2,780 fps	58,400 PSI
	Bench Mark 2	.308"	2.640"	38.0	2,549 fps	40,800 PSI	42.6	2,834 fps	59,200 PSI
	AR2206H	.308"	2.640"	40.0	2,648 fps	45,500 PSI	44.4C	2,871 fps	58,300 PSI
	AR2208	.308"	2.640"	41.0	2,594 fps	43,700 PSI	46.0C	2,861 fps	59,100 PSI
165 GR. BAR TSX	AR2219	.308"	2.630"	36.0	2,536 fps	54,500 PSI	40.5C	2,691 fps	59,600 PSI
	Bench Mark 2	.308"	2.630"	38.0	2,486 fps	44,000 PSI	42.0C	2,719 fps	58,800 PSI
	Bench Mark 8208	.308"	2.630"	38.0	2,524 fps	44,600 PSI	42.0C	2,752 fps	58,600 PSI
	AR2206H	.308"	2.630"	39.0	2,491 fps	43,900 PSI	43.4C	2,755 fps	59,700 PSI
	AR2208	.308"	2.630"	40.0	2,465 fps	43,700 PSI	45.0C	2,748 fps	60,500 PSI
168 GR. SIE HPBT	AR2219	.308"	2.640"	36.0	2,528 fps	54,400 PSI	40.2	2,678 fps	60,200 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

30 TC				Case: Hornady Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 1.910"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. HDY SP	Bench Mark 2	.308"	2.640"	38.0	2,494 fps	44,200 PSI	41.9	2,716 fps	59,700 PSI
	AR2206H	.308"	2.640"	39.0	2,514 fps	45,100 PSI	43.5	2,744 fps	58,400 PSI
	AR2208	.308"	2.640"	40.0	2,476 fps	42,800 PSI	45.2C	2,748 fps	59,100 PSI
	Bench Mark 8208	.308"	2.640"	37.0	2,416 fps	49,000 PSI	41.5C	2,620 fps	59,900 PSI
308 Winchester	AR2206H	.308"	2.640"	38.0	2,379 fps	47,200 PSI	42.5C	2,596 fps	59,400 PSI
	AR2208	.308"	2.640"	39.0	2,345 fps	45,600 PSI	43.8C	2,579 fps	59,100 PSI
				Case: Winchester Twist: 1:12" Primer: Federal 210M			Barrel length: 24" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. BAR TSX FB	AR2207	.308"	2.690"	39.9	3,124 fps	48,800 PSI	42.5	3,278 fps	58,700 PSI
	AR2219	.308"	2.690"	46.1	3,139 fps	48,100 PSI	49.0C	3,334 fps	59,000 PSI
	Bench Mark 2	.308"	2.690"	45.2	3,005 fps	39,700 PSI	50.2C	3,316 fps	54,200 PSI
	Bench Mark 8208	.308"	2.690"	45.5	2,975 fps	37,700 PSI	50.0C	3,266 fps	50,000 PSI
	AR2206H	.308"	2.690"	46.1	3,055 fps	40,300 PSI	49.0C	3,212 fps	46,200 PSI
125 GR. SFIRE	AR2219	.308"	2.700"	38.0	2,760 fps	43,500 PSI	42.5C	2,985 fps	52,800 PSI
	Bench Mark 2	.308"	2.700"	40.0	2,736 fps	38,200 PSI	44.5C	3,019 fps	52,000 PSI
	Bench Mark 8208	.308"	2.700"	42.0	2,830 fps	41,200 PSI	46.5C	3,110 fps	54,100 PSI
	AR2206H	.308"	2.700"	42.0	2,796 fps	39,500 PSI	46.0C	3,034 fps	49,600 PSI
125 GR. SIE SP	AR2207	.308"	2.700"	36.0	2,841 fps	46,600 CUP	39.5	2,988 fps	49,800 CUP
	AR2219	.308"	2.700"	42.0	2,888 fps	43,400 CUP	45.0	3,052 fps	51,400 CUP
	Bench Mark 2	.308"	2.700"	43.0	2,821 fps	40,600 CUP	47.5	3,070 fps	50,700 CUP
	Bench Mark 8208	.308"	2.700"	46.0	3,000 fps	50,200 PSI	49.2C	3,174 fps	60,100 PSI
	AR2206H	.308"	2.700"	45.0	2,891 fps	36,800 CUP	49.0C	3,127 fps	48,400 CUP
	AR2208	.308"	2.700"	48.0	3,049 fps	42,400 CUP	50.0C	3,135 fps	45,700 CUP
130 GR. SPR HP	AR2207	.308"	2.615"	35.0	2,745 fps	44,700 CUP	37.0	2,837 fps	49,700 CUP
	AR2219	.308"	2.615"	40.0	2,754 fps	41,200 CUP	43.0	2,924 fps	49,800 CUP
	Bench Mark 2	.308"	2.615"	41.0	2,704 fps	38,800 CUP	46.0	2,985 fps	50,100 CUP
	Bench Mark 8208	.308"	2.615"	43.0	2,834 fps	46,900 PSI	48.0C	3,110 fps	62,100 PSI
130 GR.	AR2206	-	-	43.0	2,740 fps	-	47.5C	3,025 fps	-
130 GR. SPR HP	AR2206H	.308"	2.615"	45.0	2,903 fps	41,800 CUP	49.0C	3,099 fps	50,100 CUP
	AR2208	.308"	2.615"	47.0	2,975 fps	42,900 CUP	50.0C	3,130 fps	50,400 CUP
144 GR.	AR2206	-	-	40.5	2,600 fps	-	45.0	2,890 fps	-
150 GR. NOS E-TIP	Bench Mark 2	.308"	2.800"	39.9	2,629 fps	47,300 PSI	43.0	2,819 fps	59,600 PSI
	Bench Mark 8208	.308"	2.800"	40.8	2,659 fps	45,900 PSI	44.3	2,889 fps	60,000 PSI
	AR2206H	.308"	2.800"	41.5	2,677 fps	48,700 PSI	45.6	2,893 fps	60,500 PSI
	AR2208	.308"	2.800"	42.3	2,670 fps	46,700 PSI	46.5C	2,914 fps	60,400 PSI
150 GR. NOS BT	Trail Boss	.308"	2.800"	10.0	1,176 fps	25,800 PSI	14.0	1,417 fps	27,100 PSI
	AR2219	.308"	2.800"	37.0	2,508 fps	39,100 CUP	40.0	2,702 fps	50,500 CUP
	Bench Mark 2	.308"	2.800"	39.0	2,521 fps	38,800 CUP	43.0	2,752 fps	49,900 CUP
	Bench Mark 8208	.308"	2.800"	40.0	2,604 fps	45,500 PSI	44.5C	2,870 fps	60,800 PSI
	AR2206H	.308"	2.800"	43.0	2,742 fps	43,200 CUP	45.5	2,870 fps	51,000 CUP
	AR2208	.308"	2.800"	44.0	2,788 fps	43,300 CUP	47.0C	2,937 fps	50,300 CUP

C = Compressed Load: L = Lead Projectile

RIFLE DATA

308 Winchester				Case: Winchester Twist: 1:12" Primer: Federal 210M			Barrel length: 24" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
155 GR. SIE HPBT	AR2219	.308"	2.775"	38.0	2,588 fps	42,400 CUP	41.0	2,710 fps	49,400 CUP
	Bench Mark 2	.308"	2.775"	39.0	2,538 fps	41,900 CUP	43.0	2,753 fps	50,200 CUP
	Bench Mark 8208	.308"	2.775"	41.0	2,619 fps	47,300 PSI	45.3	2,854 fps	60,900 PSI
155 GR.	AR2206	-	-	40.0	2,540 fps	-	44.5	2,825 fps	-
155 GR. SIE HPBT	AR2206H	.308"	2.775"	43.0	2,735 fps	42,000 CUP	46.0	2,873 fps	49,700 CUP
	AR2208	.308"	2.775"	44.0	2,759 fps	41,300 CUP	47.0C	2,909 fps	49,400 CUP
165 GR. HDY SP	Bench Mark 2	.308"	2.750"	38.5	2,438 fps	40,200 CUP	42.5	2,647 fps	50,500 CUP
	Bench Mark 8208	.308"	2.750"	38.5	2,491 fps	49,100 PSI	42.8	2,691 fps	60,200 PSI
	AR2206H	.308"	2.750"	41.0	2,525 fps	38,600 CUP	43.5	2,694 fps	50,000 CUP
	AR2208	.308"	2.750"	42.0	2,582 fps	40,800 CUP	46.0C	2,773 fps	50,500 CUP
168 GR. BAR TTSX BT	Bench Mark 2	.308"	2.800"	38.0	2,458 fps	44,500 PSI	42.0C	2,686 fps	59,500 PSI
	Bench Mark 8208	.308"	2.800"	39.0	2,505 fps	46,500 PSI	43.0C	2,724 fps	60,700 PSI
	AR2206H	.308"	2.800"	39.0	2,497 fps	45,100 PSI	43.0C	2,727 fps	59,900 PSI
	AR2208	.308"	2.800"	41.0	2,514 fps	46,100 PSI	45.0C	2,737 fps	60,000 PSI
168 GR. SIE HPBT	AS30N	.308"	2.800"	-	-	-	8.0	1,060 fps	26,800 CUP
	Bench Mark 2	.308"	2.800"	38.0	2,416 fps	38,100 CUP	42.0	2,630 fps	49,300 CUP
	Bench Mark 8208	.308"	2.800"	39.0	2,493 fps	49,000 PSI	43.3	2,707 fps	61,500 PSI
168 GR.	AR2206	-	-	39.5	2,445 fps	-	43.7	2,705 fps	-
168 GR. SIE HPBT	AR2206H	.308"	2.800"	41.0	2,551 fps	38,300 CUP	43.5	2,703 fps	49,500 CUP
	AR2208	.308"	2.800"	42.0	2,520 fps	41,200 CUP	46.0C	2,731 fps	50,600 CUP
175 GR. SIE HPBT	Bench Mark 2	.308"	2.800"	38.0	2,400 fps	40,100 CUP	41.5	2,590 fps	50,800 CUP
	Bench Mark 8208	.308"	2.800"	39.0	2,511 fps	52,200 PSI	42.5	2,664 fps	61,800 PSI
175 GR.	AR2206	-	-	38.0	2,370 fps	-	41.5	2,590 fps	-
175 GR. SIE HPBT	AR2206H	.308"	2.800"	40.0	2,489 fps	39,100 CUP	42.7	2,647 fps	49,000 CUP
	AR2208	.308"	2.800"	42.0	2,583 fps	42,600 CUP	45.0C	2,690 fps	48,600 CUP
180 GR. SPR SP	Bench Mark 2	.308"	2.800"	38.0	2,363 fps	40,700 CUP	41.3	2,542 fps	50,800 CUP
	Bench Mark 8208	.308"	2.800"	36.0	2,340 fps	51,600 PSI	40.0	2,497 fps	60,100 PSI
	AR2206H	.308"	2.800"	40.0	2,454 fps	41,200 CUP	42.5	2,595 fps	49,700 CUP
	AR2208	.308"	2.800"	41.0	2,470 fps	41,200 CUP	45.0C	2,661 fps	49,600 CUP
190 GR. HDY BTSP	Bench Mark 2	.308"	2.740"	37.0	2,288 fps	41,100 CUP	39.5	2,418 fps	48,500 CUP
	Bench Mark 8208	.308"	2.740"	36.0	2,303 fps	51,700 PSI	40.0	2,459 fps	59,800 PSI
	AR2206H	.308"	2.740"	39.0	2,359 fps	40,400 CUP	42.0	2,514 fps	49,500 CUP
	AR2208	.308"	2.740"	41.0	2,452 fps	46,100 CUP	44.0C	2,536 fps	49,100 CUP
200 GR. SFT SP	Bench Mark 2	.308"	2.700"	37.5	2,227 fps	43,000 CUP	40.0	2,355 fps	50,100 CUP
	Bench Mark 8208	.308"	2.700"	35.5	2,250 fps	51,900 PSI	39.5	2,400 fps	59,900 PSI
	AR2206H	.308"	2.700"	38.0	2,256 fps	42,400 CUP	41.0C	2,403 fps	49,400 CUP
	AR2208	.308"	2.700"	39.0	2,288 fps	43,100 CUP	42.0C	2,441 fps	50,100 CUP
208 GR. HDY A-MAX	Bench Mark 2	.308"	2.820"	35.2	2,207 fps	51,000 PSI	38.3	2,346 fps	59,300 PSI
	Bench Mark 8208	.308"	2.820"	36.4	2,219 fps	48,100 PSI	39.2	2,373 fps	59,300 PSI
	AR2206H	.308"	2.820"	35.6	2,218 fps	49,900 PSI	38.8C	2,359 fps	58,600 PSI
	AR2208	.308"	2.820"	38.1	2,260 fps	49,400 PSI	41.5C	2,420 fps	59,500 PSI

RIFLE DATA

7.62 x 54R				Case: Norma Twist: 1:10" Primer: Federal 210M			Barrel length: 24" Trim length: 2.104"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY SP	Bench Mark 2	.308"	2.715"	47.0	3,060 fps	39,700 CUP	50.5	3,213 fps	44,900 CUP
	AR2206H	.308"	2.715"	51.0	3,150 fps	35,500 CUP	55.0C	3,345 fps	43,400 CUP
	AR2208	.308"	2.715"	51.0	3,016 fps	34,700 CUP	55.0C	3,200 fps	39,900 CUP
125 GR. SIE SP	AR2206H	.308"	2.715"	50.0	3,036 fps	36,700 CUP	54.0C	3,236 fps	45,700 CUP
	AR2208	.308"	2.715"	51.0	2,967 fps	37,400 CUP	55.0C	3,139 fps	45,700 CUP
150 GR. NOS BT	AR2206H	.308"	2.875"	46.0	2,769 fps	38,000 CUP	49.5C	2,938 fps	46,300 CUP
	AR2208	.308"	2.875"	47.0	2,721 fps	38,000 CUP	50.5	2,985 fps	46,400 CUP
165 GR. BAR XBTC	AR2206H	.308"	2.950"	44.0	2,633 fps	40,200 CUP	47.0	2,761 fps	45,800 CUP
	AR2208	.308"	2.950"	45.0	2,581 fps	39,800 CUP	48.3	2,727 fps	46,000 CUP
	AR2209	.308"	2.950"	52.0	2,608 fps	36,300 CUP	55.0C	2,740 fps	41,500 CUP
180 GR. SFT SCIR	AR2206H	.308"	2.975"	42.0	2,482 fps	40,900 CUP	45.4C	2,618 fps	45,800 CUP
	AR2208	.308"	2.975"	43.0	2,409 fps	38,400 CUP	46.5C	2,575 fps	45,900 CUP
	AR2209	.308"	2.975"	51.0	2,493 fps	37,600 CUP	55.0C	2,692 fps	44,700 CUP
	AR2213SC	.308"	2.975"	51.0	2,281 fps	31,900 CUP	55.0C	2,484 fps	39,200 CUP
200 GR. SPR SP	AR2206H	.308"	2.950"	39.0	2,271 fps	41,400 CUP	42.2	2,411 fps	46,400 CUP
	AR2208	.308"	2.950"	41.0	2,304 fps	41,500 CUP	44.0	2,412 fps	46,000 CUP
	AR2209	.308"	2.950"	48.0	2,329 fps	37,400 CUP	52.0	2,529 fps	46,500 CUP
	AR2213SC	.308"	2.950"	52.0	2,348 fps	41,100 CUP	55.0C	2,468 fps	45,700 CUP
220 GR. HDY JRN	AR2206H	.308"	2.830"	38.0	2,143 fps	41,200 CUP	41.0	2,263 fps	46,600 CUP
	AR2208	.308"	2.830"	40.0	2,178 fps	42,300 CUP	42.5	2,269 fps	46,000 CUP
	AR2209	.308"	2.830"	47.0	2,227 fps	37,600 CUP	50.5C	2,396 fps	45,900 CUP
	AR2213SC	.308"	2.830"	50.0	2,209 fps	39,100 CUP	54.0C	2,381 fps	46,000 CUP
30-06 Springfield				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY SP	Bench Mark 2	.308"	3.170"	51.5	3,242 fps	45,600 CUP	55.0	3,396 fps	49,800 CUP
	Bench Mark 8208	.308"	3.170"	52.6	3,223 fps	46,200 PSI	56.0	3,415 fps	57,500 PSI
	AR2206H	.308"	3.170"	51.0	3,155 fps	39,000 CUP	57.0	3,431 fps	49,300 CUP
	AR2208	.308"	3.170"	55.0	3,308 fps	44,400 CUP	59.0	3,452 fps	48,500 CUP
125 GR. SIE SP	Bench Mark 2	.308"	3.150"	49.0	2,996 fps	40,700 CUP	52.0	3,178 fps	48,700 CUP
	Bench Mark 8208	.308"	3.150"	51.5	3,100 fps	50,400 PSI	54.7	3,243 fps	57,400 PSI
	AR2206H	.308"	3.150"	48.0	2,977 fps	41,400 CUP	53.7	3,229 fps	49,300 CUP
	AR2208	.308"	3.150"	54.0	3,159 fps	45,500 CUP	57.2	3,267 fps	49,500 CUP
130 GR. SPR HP	Bench Mark 2	.308"	3.060"	48.0	2,986 fps	44,900 CUP	51.0	3,107 fps	48,700 CUP
	Bench Mark 8208	.308"	3.060"	49.1	3,021 fps	52,100 PSI	51.7	3,126 fps	56,900 PSI
	AR2206H	.308"	3.060"	48.0	2,927 fps	38,600 CUP	53.1	3,144 fps	46,100 CUP
	AR2208	.308"	3.060"	49.0	2,979 fps	41,300 CUP	53.5	3,154 fps	48,400 CUP
150 GR. NOS E-TIP	Bench Mark 2	.308"	3.300"	44.0	2,631 fps	46,400 PSI	48.0	2,850 fps	58,600 PSI
	Bench Mark 8208	.308"	3.300"	44.0	2,677 fps	50,100 PSI	47.7	2,838 fps	58,500 PSI
	AR2206H	.308"	3.300"	43.0	2,658 fps	49,000 PSI	47.5	2,863 fps	59,700 PSI
	AR2208	.308"	3.300"	46.0	2,697 fps	49,900 PSI	49.5	2,860 fps	58,000 PSI
	AR2209	.308"	3.300"	54.0	2,747 fps	47,000 PSI	57.8C	2,927 fps	57,700 PSI
150 GR. NOS BT	Trail Boss	.308"	3.250"	13.3	1,061 fps	14,700 PSI	19.0	1,477 fps	26,400 PSI

C = Compressed Load: L = Lead Projectile

RIFLE DATA

30-06 Springfield				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	Bench Mark 2	.308"	3.250"	46.5	2,792 fps	44,600 CUP	49.5	2,944 fps	49,300 CUP
	Bench Mark 8208	.308"	3.250"	47.0	2,797 fps	50,500 PSI	50.0	2,935 fps	58,400 PSI
	AR2206H	.308"	3.250"	46.0	2,806 fps	44,400 CUP	51.0	2,976 fps	48,500 CUP
	AR2208	.308"	3.250"	47.0	2,808 fps	42,600 CUP	51.0	2,975 fps	50,000 CUP
	AR2209	.308"	3.250"	56.0	2,792 fps	37,100 CUP	62.0C	3,068 fps	48,400 CUP
155 GR. SIE HPBT	Bench Mark 2	.308"	3.225"	46.5	2,779 fps	40,500 CUP	49.5	2,916 fps	49,400 CUP
	Bench Mark 8208	.308"	3.225"	46.1	2,747 fps	50,400 PSI	49.0	2,869 fps	57,500 PSI
	AR2206H	.308"	3.225"	46.0	2,752 fps	41,200 CUP	51.0	2,925 fps	45,600 CUP
	AR2208	.308"	3.225"	48.0	2,822 fps	44,600 CUP	50.7	2,958 fps	48,800 CUP
	AR2209	.308"	3.225"	56.0	2,757 fps	36,000 CUP	62.0C	3,038 fps	47,500 CUP
165 GR. SIE SPBT	Bench Mark 2	.308"	3.300"	45.0	2,686 fps	45,600 CUP	47.7	2,795 fps	49,300 CUP
165 GR. HDY GMX	Bench Mark 8208	.308"	3.225"	43.2	2,572 fps	50,800 PSI	47.0	2,717 fps	58,300 PSI
	AR2206H	.308"	3.225"	43.4	2,595 fps	50,300 PSI	46.7	2,712 fps	57,100 PSI
	AR2208	.308"	3.225"	44.5	2,526 fps	46,600 PSI	48.3	2,724 fps	59,000 PSI
	AR2209	.308"	3.225"	51.0	2,587 fps	48,600 PSI	55.4	2,781 fps	59,200 PSI
165 GR. SIE SPBT	Bench Mark 8208	.308"	3.300"	44.6	2,667 fps	55,100 PSI	46.5	2,728 fps	58,000 PSI
	AR2206H	.308"	3.300"	43.0	2,607 fps	41,100 CUP	47.5	2,782 fps	49,000 CUP
	AR2208	.308"	3.300"	47.0	2,726 fps	44,500 CUP	50.5	2,873 fps	49,700 CUP
	AR2209	.308"	3.300"	53.0	2,678 fps	38,400 CUP	59.0	2,938 fps	49,400 CUP
168 GR. HDY HPBT	Bench Mark 2	.308"	3.230"	44.0	2,614 fps	42,900 CUP	47.2	2,760 fps	49,400 CUP
	Bench Mark 8208	.308"	3.230"	45.1	2,661 fps	54,800 PSI	48.0	2,748 fps	58,700 PSI
	AR2206H	.308"	3.230"	43.0	2,574 fps	41,200 CUP	47.5	2,789 fps	50,000 CUP
	AR2208	.308"	3.230"	47.0	2,710 fps	42,700 CUP	50.5	2,859 fps	49,200 CUP
	AR2209	.308"	3.230"	55.0	2,695 fps	40,400 CUP	59.0	2,897 fps	48,100 CUP
175 GR. SIE HPBT	AR2206H	.308"	3.300"	43.8	2,584 fps	44,100 CUP	46.7	2,700 fps	49,000 CUP
	AR2208	.308"	3.300"	45.0	2,551 fps	41,700 CUP	48.0	2,694 fps	49,000 CUP
	AR2209	.308"	3.300"	55.0	2,661 fps	42,100 CUP	59.0	2,842 fps	48,700 CUP
	AR2213SC	.308"	3.300"	57.0	2,535 fps	38,300 CUP	61.5C	2,719 fps	44,400 CUP
180 GR. SIE SPBT	Bench Mark 2	.308"	3.300"	43.0	2,550 fps	45,600 CUP	46.0	2,660 fps	49,000 CUP
	AR2206H	.308"	3.300"	41.0	2,427 fps	38,100 CUP	46.0	2,638 fps	48,800 CUP
	AR2208	.308"	3.300"	44.0	2,533 fps	41,900 CUP	47.0	2,668 fps	50,000 CUP
	AR2209	.308"	3.300"	52.0	2,543 fps	37,800 CUP	57.5	2,798 fps	49,300 CUP
	AR2213SC	.308"	3.300"	54.0	2,447 fps	34,700 CUP	60.0C	2,710 fps	44,300 CUP
190 GR. HDY BTSP	AR2206H	.308"	3.220"	41.0	2,380 fps	41,400 CUP	45.5	2,525 fps	48,000 CUP
	AR2208	.308"	3.220"	43.5	2,450 fps	41,800 CUP	46.5	2,608 fps	49,700 CUP
	AR2209	.308"	3.220"	51.0	2,451 fps	39,500 CUP	56.5	2,692 fps	49,200 CUP
	AR2213SC	.308"	3.220"	57.0	2,514 fps	44,100 CUP	61.0C	2,668 fps	50,000 CUP
200 GR. NOS AB	AR2206H	.308"	3.300"	41.0	2,355 fps	43,700 CUP	44.0	2,474 fps	49,500 CUP
	AR2208	.308"	3.300"	42.0	2,337 fps	41,900 CUP	47.0	2,505 fps	49,100 CUP
	AR2209	.308"	3.300"	50.0	2,412 fps	40,400 CUP	53.7	2,580 fps	48,400 CUP
	AR2213SC	.308"	3.300"	55.0	2,427 fps	42,100 CUP	59.0C	2,586 fps	49,300 CUP
	AR2217	.308"	3.300"	57.0	2,329 fps	35,800 CUP	61.0C	2,487 fps	42,200 CUP
200 GR. SPR SP	AR2206H	.308"	3.230"	39.0	2,246 fps	40,700 CUP	43.5	2,421 fps	49,200 CUP
	AR2208	.308"	3.230"	42.5	2,373 fps	44,700 CUP	45.5	2,501 fps	49,600 CUP
	AR2209	.308"	3.230"	50.0	2,431 fps	44,500 CUP	53.0	2,544 fps	49,100 CUP

RIFLE DATA

30-06 Springfield				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
208 GR. HDY A-MAX	AR2213SC	.308"	3.230"	54.0	2,436 fps	43,200 CUP	57.5C	2,577 fps	49,400 CUP
	AR2217	.308"	3.230"	55.0	2,267 fps	33,600 CUP	61.0C	2,510 fps	44,400 CUP
	AR2206H	.308"	3.285"	38.9	2,203 fps	48,700 PSI	43.2	2,362 fps	57,400 PSI
	AR2208	.308"	3.285"	40.9	2,226 fps	47,900 PSI	45.0	2,415 fps	59,200 PSI
220 GR. HDY JRN	AR2209	.308"	3.285"	47.6	2,303 fps	47,600 PSI	52.4	2,499 fps	59,600 PSI
	AR2213SC	.308"	3.285"	52.1	2,301 fps	47,100 PSI	58.0C	2,511 fps	58,700 PSI
	AR2208	.308"	3.230"	42.0	2,279 fps	44,000 CUP	45.0	2,382 fps	49,400 CUP
	AR2209	.308"	3.230"	50.0	2,318 fps	43,400 CUP	53.0	2,435 fps	49,200 CUP
220 GR. HDY JRN	AR2213SC	.308"	3.230"	54.0	2,342 fps	43,300 CUP	57.5C	2,458 fps	48,600 CUP
	AR2217	.308"	3.230"	58.0	2,293 fps	36,500 CUP	61.0C	2,412 fps	43,600 CUP
30-06 Improved				Case: Twist: - Primer:			Barrel length: 24" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
130 GR.	AR2209	-	-	-	-	-	65.0	3,250 fps	-
150 GR.	AR2209	-	-	-	-	-	62.5	3,100 fps	-
165 GR.	AR2209	-	-	-	-	-	59.5	3,000 fps	-
180 GR.	AR2209	-	-	-	-	-	58.0	2,900 fps	-
200 GR.	AR2209	-	-	-	-	-	56.0	2,750 fps	-
300 H & H Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
130 GR. SPR HP	AR2209	.308"	3.440"	68.0	3,142 fps	-	72.0	3,394 fps	-
	AR2213SC	.308"	3.440"	75.0	3,186 fps	-	81.0	3,362 fps	-
150 GR. HDY SP	AR2209	.308"	3.560"	67.0	2,998 fps	-	71.0	3,202 fps	-
	AR2213SC	.308"	3.560"	72.0	3,096 fps	-	78.0	3,313 fps	-
165 GR. NOS PART	AR2209	.308"	3.560"	66.0	3,018 fps	-	69.0	3,164 fps	-
	AR2213SC	.308"	3.560"	71.0	2,949 fps	-	77.0	3,099 fps	-
200 GR. SIE HPBT	AR2209	.308"	3.655"	62.0	2,747 fps	-	66.0	2,909 fps	-
	AR2213SC	.308"	3.655"	67.0	2,737 fps	-	72.0	2,932 fps	-
220 GR. HDY RN	AR2209	.308"	3.580"	60.0	2,595 fps	-	64.0	2,717 fps	-
	AR2213SC	.308"	3.580"	65.0	2,655 fps	-	70.0	2,714 fps	-
250 GR. BAR RN	AR2209	.308"	3.580"	59.0	2,344 fps	-	62.0	2,493 fps	-
	AR2213SC	.308"	3.580"	63.0	2,372 fps	-	67.0	2,563 fps	-

RIFLE DATA

308 Norma Magnum				Case: Norma Twist: 1:10" Primer: CCI 250			Barrel length: 26" Trim length: 2.550"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
100 GR. SPR RN SP	AR2206H	.308"	2.870"	-	-	-	52.0	2,997 fps	-
110 GR. SIE HP	AR2206H	.308"	3.160"	59.0	3,339 fps	41,400 CUP	64.0	3,554 fps	53,000 CUP
	AR2209	.308"	3.160"	72.0	3,202 fps	39,400 CUP	77.0	3,506 fps	51,200 CUP
	AR2213SC	.308"	3.160"	73.0	3,229 fps	37,800 CUP	80.0	3,563 fps	50,100 CUP
130 GR. HDY SP	AR2206H	.308"	3.275"	59.0	3,166 fps	42,600 CUP	64.0	3,388 fps	50,500 CUP
	AR2209	.308"	3.275"	71.0	3,139 fps	42,400 CUP	74.0	3,292 fps	51,400 CUP
	AR2213SC	.308"	3.275"	73.0	3,201 fps	40,800 CUP	79.0	3,302 fps	45,900 CUP
	AR2217	.308"	3.275"	80.0	3,211 fps	44,400 CUP	84.0	3,333 fps	46,400 CUP
150 GR. NOS PART	AR2206H	.308"	3.300"	57.0	2,940 fps	42,000 CUP	62.0	3,192 fps	54,700 CUP
	AR2209	.308"	3.300"	69.0	2,914 fps	43,100 CUP	73.0	3,188 fps	51,200 CUP
	AR2213SC	.308"	3.300"	70.0	3,157 fps	47,800 CUP	76.0	3,258 fps	51,900 CUP
	AR2217	.308"	3.300"	79.0	3,090 fps	46,600 CUP	83.0	3,279 fps	50,800 CUP
168 GR. SIE HPBT	AR2206H	.308"	3.250"	56.0	2,859 fps	48,200 CUP	61.0	3,059 fps	52,100 CUP
	AR2209	.308"	3.250"	68.0	2,880 fps	42,000 CUP	72.0	3,114 fps	51,000 CUP
	AR2213SC	.308"	3.250"	69.0	2,944 fps	43,800 CUP	75.0	3,140 fps	52,300 CUP
	AR2217	.308"	3.250"	75.0	2,939 fps	47,100 CUP	79.0	3,123 fps	52,000 CUP
180 GR. HDY SP	AR2206H	.308"	3.345"	54.0	2,732 fps	48,200 CUP	59.0	2,898 fps	53,400 CUP
	AR2209	.308"	3.345"	65.0	2,770 fps	43,000 CUP	69.0	2,999 fps	52,800 CUP
	AR2213SC	.308"	3.345"	67.0	2,865 fps	43,200 CUP	73.0	3,022 fps	52,300 CUP
	AR2217	.308"	3.345"	72.0	2,769 fps	45,900 CUP	76.0	2,940 fps	51,900 CUP
190 GR. HDY BTSP	AR2217	.308"	3.435"	70.0	2,711 fps	45,500 CUP	74.0	2,891 fps	51,100 CUP
200 GR. NOS PART	AR2209	.308"	3.400"	63.0	2,740 fps	44,700 CUP	67.0	2,851 fps	52,100 CUP
	AR2213SC	.308"	3.400"	64.5	2,662 fps	44,400 CUP	70.0	2,889 fps	52,700 CUP
	AR2217	.308"	3.400"	69.0	2,674 fps	47,400 CUP	73.0	2,859 fps	54,500 CUP
220 GR. HDY RN	AR2209	.308"	3.360"	61.0	2,519 fps	42,200 CUP	65.0	2,707 fps	52,800 CUP
	AR2213SC	.308"	3.360"	63.0	2,437 fps	42,600 CUP	68.0	2,697 fps	52,700 CUP
	AR2217	.308"	3.360"	66.0	2,449 fps	46,000 CUP	70.0	2,672 fps	52,000 CUP
300 Ruger Compact Magnum				Case: Hornady Twist: 1:10" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.090"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
135 GR. SIE HPBT	AR2206H	.308"	2.820"	54.0	3,090 fps	50,900 PSI	57.4	3,259 fps	60,000 PSI
	AR2208	.308"	2.820"	55.2	3,064 fps	51,300 PSI	58.7	3,267 fps	63,200 PSI
150 GR. HDY IB	AR2206H	.308"	2.830"	51.7	2,922 fps	52,000 PSI	55.0	3,091 fps	62,500 PSI
	AR2208	.308"	2.830"	53.0	2,918 fps	53,600 PSI	56.4	3,086 fps	62,700 PSI
	AR2209	.308"	2.830"	59.1	2,901 fps	50,300 PSI	63.5C	3,118 fps	61,800 PSI
155 GR. NOS HPBT	AR2206H	.308"	2.830"	52.5	2,929 fps	54,700 PSI	55.0	3,066 fps	62,300 PSI
	AR2208	.308"	2.830"	52.6	2,896 fps	53,800 PSI	56.0	3,041 fps	61,900 PSI
	AR2209	.308"	2.830"	58.6	2,819 fps	47,100 PSI	62.3	3,062 fps	60,800 PSI
165 GR. BAR TSX	AR2206H	.308"	2.800"	49.8	2,785 fps	55,900 PSI	53.0	2,917 fps	62,700 PSI
	AR2208	.308"	2.800"	50.1	2,718 fps	53,100 PSI	54.2	2,908 fps	62,600 PSI
	AR2209	.308"	2.800"	58.8	2,843 fps	55,600 PSI	62.5C	2,979 fps	62,700 PSI
168 GR. SIE HPBT	AR2206H	.308"	2.820"	50.3	2,803 fps	56,600 PSI	53.5	2,907 fps	61,700 PSI
	AR2208	.308"	2.820"	51.0	2,755 fps	52,900 PSI	54.3	2,890 fps	60,500 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

300 Ruger Compact Magnum				Case: Hornady Twist: 1:10" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.090"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
178 GR. HDY A-MAX	AR2209	.308"	2.820"	57.3	2,736 fps	47,900 PSI	61.0	2,947 fps	61,200 PSI
	AR2206H	.308"	2.840"	48.4	2,685 fps	54,000 PSI	51.5	2,793 fps	61,200 PSI
	AR2208	.308"	2.840"	50.0	2,701 fps	55,500 PSI	53.2	2,820 fps	62,300 PSI
	AR2209	.308"	2.840"	56.9	2,729 fps	53,600 PSI	60.5C	2,886 fps	62,200 PSI
180 GR. HDY SP	AR2206H	.308"	2.820"	47.2	2,575 fps	51,900 PSI	50.2	2,711 fps	60,400 PSI
	AR2208	.308"	2.820"	49.4	2,625 fps	54,800 PSI	52.6	2,755 fps	62,700 PSI
	AR2209	.308"	2.820"	56.4	2,648 fps	50,700 PSI	60.0C	2,826 fps	62,600 PSI
200 GR. SFT AF/SS	AR2206H	.308"	2.775"	45.6	2,440 fps	54,600 PSI	48.5	2,546 fps	61,800 PSI
	AR2208	.308"	2.775"	48.3	2,498 fps	57,200 PSI	51.4	2,586 fps	61,700 PSI
	AR2209	.308"	2.775"	55.2	2,544 fps	53,300 PSI	58.7C	2,710 fps	62,600 PSI
300 Remington S.A. Ultra Mag.				Case: Remington Twist: 1:10" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. SPR SP	AR2206H	.308"	2.600"	58.0	3,431 fps	50,600 PSI	62.0	3,663 fps	63,000 PSI
	AR2208	.308"	2.600"	60.5	3,391 fps	51,100 PSI	64.5	3,619 fps	63,200 PSI
125 GR. NOS BT	AR2206H	.308"	2.825"	58.0	3,341 fps	54,700 PSI	62.0	3,557 fps	64,300 PSI
	AR2208	.308"	2.825"	60.0	3,297 fps	52,700 PSI	64.0	3,511 fps	64,200 PSI
	AR2209	.308"	2.825"	65.0	3,172 fps	47,800 PSI	69.0C	3,374 fps	58,300 PSI
130 GR. HDY SP	AR2206H	.308"	2.750"	55.5	3,182 fps	51,700 PSI	59.0	3,360 fps	62,800 PSI
	AR2208	.308"	2.750"	57.5	3,165 fps	53,600 PSI	61.0	3,330 fps	62,600 PSI
	AR2209	.308"	2.750"	65.0	3,198 fps	54,700 PSI	69.0C	3,359 fps	63,500 PSI
135 GR. SIE SP	AR2206H	.308"	2.750"	55.5	3,166 fps	52,700 PSI	59.0	3,340 fps	62,500 PSI
	AR2208	.308"	2.750"	56.5	3,079 fps	52,000 PSI	60.0	3,272 fps	63,100 PSI
	AR2209	.308"	2.750"	63.0	3,090 fps	51,900 PSI	67.0C	3,283 fps	63,500 PSI
150 GR. SPR GSSP	AR2206H	.308"	2.700"	53.0	3,007 fps	55,900 PSI	57.0	3,147 fps	62,800 PSI
	AR2208	.308"	2.700"	55.0	2,967 fps	52,700 PSI	59.0	3,148 fps	63,200 PSI
	AR2209	.308"	2.700"	62.0	2,985 fps	52,600 PSI	65.5C	3,147 fps	62,100 PSI
155 GR. HDY A-MAX	AR2206H	.308"	2.825"	52.0	2,895 fps	50,800 PSI	55.5	3,064 fps	61,700 PSI
	AR2208	.308"	2.825"	54.5	2,925 fps	53,900 PSI	57.7	3,082 fps	63,200 PSI
	AR2209	.308"	2.825"	60.5	2,900 fps	50,200 PSI	64.5	3,112 fps	63,500 PSI
165 GR. NOS PART	AR2206H	.308"	2.825"	50.5	2,827 fps	56,500 PSI	54.0	2,946 fps	63,000 PSI
	AR2208	.308"	2.825"	53.0	2,833 fps	55,400 PSI	56.5	2,967 fps	63,100 PSI
	AR2209	.308"	2.825"	59.0	2,797 fps	50,200 PSI	63.0	2,997 fps	62,900 PSI
168 GR. SIE HPBT	AR2206H	.308"	2.825"	51.0	2,833 fps	57,000 PSI	54.5	2,948 fps	63,100 PSI
	AR2208	.308"	2.825"	53.5	2,835 fps	55,600 PSI	56.5	2,955 fps	62,700 PSI
	AR2209	.308"	2.825"	58.0	2,771 fps	49,500 PSI	62.5	2,985 fps	63,000 PSI
	AR2213SC	.308"	2.825"	64.0	2,801 fps	53,200 PSI	68.0C	2,950 fps	62,600 PSI
175 GR. SIE HPBT	AR2209	.308"	2.825"	59.0	2,806 fps	54,000 PSI	62.5	2,945 fps	62,700 PSI
	AR2213SC	.308"	2.825"	64.0	2,785 fps	54,800 PSI	68.0C	2,924 fps	62,600 PSI
180 GR. SFT SCIR	AR2206H	.308"	2.825"	48.0	2,693 fps	57,000 PSI	51.5	2,823 fps	64,700 PSI
	AR2208	.308"	2.825"	50.0	2,680 fps	53,600 PSI	54.0	2,842 fps	63,600 PSI
	AR2209	.308"	2.825"	58.0	2,772 fps	55,600 PSI	61.6C	2,907 fps	63,500 PSI
190 GR. SIE HPBT	AR2209	.308"	2.825"	56.0	2,660 fps	52,100 PSI	60.0	2,836 fps	62,900 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

300 Remington S.A. Ultra Mag.				Case: Remington Twist: 1:10" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. NOS PART	AR2213SC	.308"	2.825"	61.0	2,660 fps	54,000 PSI	65.5C	2,811 fps	62,800 PSI
	AR2209	.308"	2.825"	56.0	2,584 fps	51,600 PSI	59.5C	2,751 fps	63,200 PSI
	AR2213SC	.308"	2.825"	63.0	2,639 fps	55,500 PSI	66.0C	2,755 fps	63,300 PSI
220 GR. HDY RN	AR2209	.308"	2.750"	54.0	2,470 fps	54,200 PSI	58.0	2,608 fps	63,700 PSI
	AR2213SC	.308"	2.750"	60.0	2,497 fps	55,800 PSI	63.5C	2,614 fps	63,500 PSI
300 Winchester Short Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.090"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. SPR SP	Bench Mark 8208	.308"	2.650"	60.3	3,555 fps	54,400 PSI	63.5	3,697 fps	62,400 PSI
	AR2206H	.308"	2.650"	60.0	3,495 fps	56,800 PSI	63.5	3,647 fps	63,600 PSI
	AR2208	.308"	2.650"	62.0	3,454 fps	54,300 PSI	66.0	3,631 fps	63,200 PSI
	AR2209	.308"	2.650"	70.0	3,437 fps	53,500 PSI	74.5C	3,646 fps	63,300 PSI
125 GR. NOS BT	Bench Mark 8208	.308"	2.810"	58.3	3,350 fps	53,600 PSI	62.0	3,496 fps	61,700 PSI
	AR2206H	.308"	2.810"	58.0	3,314 fps	56,600 PSI	61.0	3,431 fps	63,000 PSI
	AR2208	.308"	2.810"	61.0	3,312 fps	54,700 PSI	65.0	3,478 fps	63,100 PSI
	AR2209	.308"	2.810"	69.0	3,332 fps	55,800 PSI	73.0	3,481 fps	63,000 PSI
130 GR. HDY SP	Bench Mark 8208	.308"	2.720"	56.4	3,272 fps	56,600 PSI	60.0	3,391 fps	61,900 PSI
	AR2206H	.308"	2.720"	56.0	3,213 fps	55,700 PSI	58.5	3,318 fps	63,000 PSI
	AR2208	.308"	2.720"	60.0	3,269 fps	58,100 PSI	63.5	3,388 fps	63,500 PSI
	AR2209	.308"	2.720"	67.0	3,237 fps	54,900 PSI	71.0	3,393 fps	63,200 PSI
150 GR. SPR GSSP	Trail Boss	.308"	2.780"	16.3	1,473 fps	26,400 PSI	23.3	1,758 fps	31,600 PSI
	Bench Mark 8208	.308"	2.780"	52.6	2,992 fps	55,800 PSI	56.0	3,115 fps	62,300 PSI
	AR2206H	.308"	2.780"	51.0	2,919 fps	53,400 PSI	54.5	3,078 fps	63,100 PSI
	AR2208	.308"	2.780"	55.0	3,008 fps	56,800 PSI	58.5	3,140 fps	63,800 PSI
	AR2209	.308"	2.780"	63.0	3,040 fps	55,700 PSI	67.0	3,187 fps	63,200 PSI
155 GR. HDY A-MAX	Bench Mark 8208	.308"	2.860"	53.0	2,990 fps	56,800 PSI	56.4	3,110 fps	63,400 PSI
	AR2206H	.308"	2.860"	52.0	2,935 fps	55,800 PSI	55.0	3,061 fps	63,600 PSI
	AR2208	.308"	2.860"	55.0	2,963 fps	54,800 PSI	58.5	3,110 fps	63,600 PSI
	AR2209	.308"	2.860"	63.0	3,014 fps	55,300 PSI	66.5	3,156 fps	63,200 PSI
165 GR. HDY GMX	Bench Mark 8208	.308"	2.840"	48.0	2,743 fps	55,600 PSI	52.0	2,887 fps	63,300 PSI
	AR2206H	.308"	2.840"	47.0	2,700 fps	51,900 PSI	51.0	2,887 fps	63,300 PSI
	AR2208	.308"	2.840"	51.0	2,810 fps	56,700 PSI	54.5	2,948 fps	63,600 PSI
	AR2209	.308"	2.840"	58.0	2,821 fps	52,400 PSI	62.0C	2,986 fps	61,300 PSI
165 GR. NOS PART	Bench Mark 8208	.308"	2.860"	51.1	2,849 fps	55,600 PSI	54.4	2,963 fps	61,700 PSI
	AR2206H	.308"	2.860"	51.0	2,810 fps	55,700 PSI	54.0	2,929 fps	63,200 PSI
	AR2208	.308"	2.860"	54.0	2,859 fps	56,400 PSI	57.5	2,987 fps	63,700 PSI
	AR2209	.308"	2.860"	61.0	2,898 fps	54,800 PSI	65.5	3,047 fps	63,600 PSI
168 GR. SIE HPBT	Bench Mark 8208	.308"	2.840"	51.5	2,853 fps	56,400 PSI	54.8	2,970 fps	63,400 PSI
	AR2209	.308"	2.840"	61.0	2,908 fps	56,000 PSI	64.5	3,034 fps	63,700 PSI
	AR2213SC	.308"	2.840"	65.0	2,848 fps	53,400 PSI	69.5C	3,015 fps	63,200 PSI
175 GR. SIE HPBT	AR2209	.308"	2.860"	61.0	2,839 fps	53,300 PSI	65.0	3,009 fps	63,400 PSI
	AR2213SC	.308"	2.860"	66.0	2,848 fps	55,300 PSI	70.0C	2,980 fps	63,100 PSI
180 GR. NOS E-TIP	AR2209	.308"	2.860"	59.0	2,751 fps	54,900 PSI	63.7C	2,925 fps	63,800 PSI

C = Compressed Load; L = Lead Projectile

RIFLE DATA

300 Winchester Short Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.090"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SFT SCIR	AR2209	.308"	2.860"	60.0	2,799 fps	55,700 PSI	64.0	2,950 fps	63,900 PSI
	AR2213SC	.308"	2.860"	65.5	2,775 fps	52,000 PSI	70.0C	2,929 fps	64,000 PSI
190 GR. SIE HPBT	AR2209	.308"	2.860"	57.5	2,736 fps	56,200 PSI	61.0	2,853 fps	63,400 PSI
	AR2213SC	.308"	2.860"	62.0	2,704 fps	53,800 PSI	66.5C	2,858 fps	63,400 PSI
200 GR. SFT SP	AR2209	.308"	2.790"	58.0	2,666 fps	55,000 PSI	62.0	2,792 fps	63,200 PSI
	AR2213SC	.308"	2.790"	63.0	2,678 fps	56,000 PSI	66.5C	2,802 fps	63,700 PSI
	AR2217	.308"	2.790"	70.0	2,660 fps	51,600 PSI	72.0C	2,737 fps	57,200 PSI
208 GR. HDY A-MAX	AR2209	.308"	2.900"	56.4	2,612 fps	55,400 PSI	60.7	2,748 fps	62,800 PSI
	AR2213SC	.308"	2.900"	61.8	2,624 fps	54,800 PSI	66.5C	2,761 fps	62,500 PSI
	AR2217	.308"	2.900"	62.0	2,420 fps	42,900 PSI	69.0C	2,670 fps	55,900 PSI
220 GR. HDY RN	AR2209	.308"	2.830"	54.0	2,476 fps	54,100 PSI	58.0	2,602 fps	63,300 PSI
	AR2213SC	.308"	2.830"	60.0	2,520 fps	55,600 PSI	64.3C	2,646 fps	63,500 PSI
	AR2217	.308"	2.830"	69.0	2,597 fps	57,200 PSI	72.5C	2,689 fps	63,000 PSI
300 Winchester Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.610"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. SPR SP	AR2206H	.308"	3.215"	60.0	3,381 fps	43,300 CUP	67.0	3,665 fps	51,400 CUP
	AR2208	.308"	3.215"	67.0	3,424 fps	42,900 CUP	72.5	3,660 fps	51,700 CUP
	AR2209	.308"	3.215"	72.0	3,337 fps	39,300 CUP	80.0	3,648 fps	49,400 CUP
	AR2213SC	.308"	3.215"	79.0	3,355 fps	41,500 CUP	84.0C	3,540 fps	48,400 CUP
	AR2217	.308"	3.215"	80.0	3,189 fps	34,700 CUP	85.0C	3,392 fps	42,000 CUP
125 GR. BAR XFB	AR2206H	.308"	3.275"	57.0	3,140 fps	44,200 CUP	62.0	3,347 fps	51,100 CUP
	AR2208	.308"	3.275"	65.0	3,281 fps	45,400 CUP	70.0	3,462 fps	52,700 CUP
	AR2209	.308"	3.275"	68.0	3,250 fps	46,100 CUP	73.0	3,424 fps	51,600 CUP
	AR2213SC	.308"	3.275"	75.0	3,286 fps	47,300 CUP	80.0	3,450 fps	52,000 CUP
	AR2217	.308"	3.275"	80.0	3,260 fps	44,200 CUP	85.0C	3,418 fps	48,700 CUP
130 GR. HDY SP	Bench Mark 8208	.308"	3.300"	60.0	3,202 fps	52,200 PSI	65.0	3,386 fps	62,200 PSI
	AR2206H	.308"	3.300"	58.0	3,187 fps	46,900 CUP	62.0	3,331 fps	52,500 CUP
	AR2208	.308"	3.300"	64.0	3,218 fps	45,600 CUP	68.5	3,398 fps	52,100 CUP
	AR2209	.308"	3.300"	70.0	3,219 fps	45,800 CUP	74.0	3,375 fps	51,600 CUP
	AR2213SC	.308"	3.300"	77.0	3,116 fps	44,900 CUP	82.0C	3,383 fps	51,300 CUP
	AR2217	.308"	3.300"	80.0	3,125 fps	38,900 CUP	85.0C	3,289 fps	45,000 CUP
150 GR. BAR TTSX BT	Bench Mark 8208	.308"	3.325"	57.0	2,925 fps	47,900 PSI	64.0	3,183 fps	61,100 PSI
	AR2206H	.308"	3.325"	57.0	3,006 fps	52,000 PSI	63.0	3,186 fps	59,900 PSI
	AR2209	.308"	3.325"	69.0	3,062 fps	49,600 PSI	74.0C	3,289 fps	60,600 PSI
	AR2213SC	.308"	3.325"	75.0	2,985 fps	46,300 PSI	80.0C	3,182 fps	50,100 PSI
150 GR. SIE SP	Trail Boss	.308"	3.340"	18.0	1,302 fps	18,400 PSI	25.5	1,687 fps	28,600 PSI
	Bench Mark 8208	.308"	3.340"	57.0	2,987 fps	52,600 PSI	61.5	3,156 fps	60,800 PSI
	AR2206H	.308"	3.340"	57.0	2,991 fps	47,300 CUP	61.0	3,124 fps	52,500 CUP
	AR2208	.308"	3.340"	56.0	2,952 fps	43,300 CUP	60.0	3,108 fps	51,400 CUP
	AR2209	.308"	3.340"	68.0	3,052 fps	47,100 CUP	72.0	3,205 fps	52,500 CUP
	AR2213SC	.308"	3.340"	73.0	3,025 fps	45,700 CUP	78.0	3,207 fps	52,700 CUP
	AR2217	.308"	3.340"	80.0	3,004 fps	46,500 CUP	85.0C	3,255 fps	52,200 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

300 Winchester Magnum				Case: Winchester			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.610"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
155 GR. SIE HPBT	Bench Mark 8208	.308"	3.340"	58.0	2,997 fps	55,000 PSI	61.5	3,117 fps	60,700 PSI
	AR2206H	.308"	3.340"	55.0	2,919 fps	43,700 CUP	59.0	3,078 fps	52,200 CUP
	AR2208	.308"	3.340"	55.0	2,897 fps	42,400 CUP	59.7	3,090 fps	52,000 CUP
	AR2209	.308"	3.340"	69.0	3,013 fps	45,100 CUP	74.0	3,215 fps	52,400 CUP
	AR2213SC	.308"	3.340"	74.0	2,964 fps	43,600 CUP	79.0C	3,166 fps	51,500 CUP
	AR2217	.308"	3.340"	80.0	2,992 fps	41,300 CUP	85.0C	3,160 fps	47,400 CUP
165 GR. SPR SP	AR2206H	.308"	3.340"	55.0	2,839 fps	46,700 CUP	59.0	2,977 fps	52,500 CUP
	AR2208	.308"	3.340"	54.0	2,799 fps	43,900 CUP	58.5	2,975 fps	52,900 CUP
	AR2209	.308"	3.340"	66.0	2,910 fps	46,900 CUP	70.0	3,042 fps	51,900 CUP
	AR2213SC	.308"	3.340"	72.0	2,934 fps	47,600 CUP	75.5	3,055 fps	52,200 CUP
	AR2217	.308"	3.340"	79.0	2,957 fps	44,600 CUP	84.0	3,117 fps	51,300 CUP
168 GR. HDY BTHP	AR2206H	.308"	3.340"	55.0	2,843 fps	47,800 CUP	59.0	2,977 fps	52,900 CUP
	AR2208	.308"	3.340"	54.0	2,795 fps	44,300 CUP	58.2	2,964 fps	52,900 CUP
	AR2209	.308"	3.340"	66.0	2,900 fps	45,500 CUP	70.0	3,034 fps	51,000 CUP
	AR2213SC	.308"	3.340"	72.0	2,876 fps	45,100 CUP	75.5	3,023 fps	51,400 CUP
	AR2217	.308"	3.340"	79.0	2,938 fps	44,900 CUP	84.0	3,110 fps	51,000 CUP
175 GR. SIE HPBT	AR2209	.308"	3.300"	66.0	2,832 fps	45,800 CUP	71.0	2,992 fps	52,700 CUP
	AR2213SC	.308"	3.300"	72.0	2,843 fps	46,600 CUP	76.5	3,006 fps	53,100 CUP
	AR2217	.308"	3.300"	77.0	2,820 fps	43,100 CUP	82.0C	3,008 fps	51,800 CUP
180 GR. NOS E-TIP	AR2209	.308"	3.340"	62.1	2,730 fps	52,300 PSI	66.8	2,916 fps	62,600 PSI
	AR2213SC	.308"	3.340"	66.8	2,770 fps	53,300 PSI	71.8C	2,938 fps	61,900 PSI
	AR2217	.308"	3.340"	74.6	2,821 fps	53,300 PSI	79.4C	2,984 fps	62,400 PSI
180 GR. SPR MT-SP	AR2209	.308"	3.285"	63.0	2,787 fps	46,400 CUP	67.0	2,918 fps	53,100 CUP
	AR2213SC	.308"	3.285"	69.0	2,851 fps	48,500 CUP	73.0C	2,966 fps	53,200 CUP
	AR2217	.308"	3.285"	76.0	2,883 fps	46,800 CUP	81.0C	3,042 fps	52,900 CUP
190 GR. HDY BTSP	AR2209	.308"	3.340"	63.0	2,735 fps	46,600 CUP	67.0	2,863 fps	53,400 CUP
	AR2213SC	.308"	3.340"	69.0	2,795 fps	48,400 CUP	73.0C	2,923 fps	53,600 CUP
	AR2217	.308"	3.340"	76.0	2,822 fps	44,900 CUP	81.0C	2,990 fps	52,800 CUP
200 GR. NOS AB	AR2209	.308"	3.340"	60.0	2,576 fps	44,400 CUP	64.4	2,723 fps	51,600 CUP
	AR2213SC	.308"	3.340"	67.0	2,686 fps	49,500 CUP	71.5C	2,785 fps	52,800 CUP
	AR2217	.308"	3.340"	72.0	2,662 fps	44,500 CUP	77.0C	2,826 fps	52,600 CUP
	AR2225	.308"	3.340"	73.0	2,703 fps	44,600 CUP	78.0C	2,872 fps	52,100 CUP
200 GR. NOS PART	AR2209	.308"	3.340"	63.0	2,646 fps	47,800 CUP	66.0	2,753 fps	51,700 CUP
	AR2213SC	.308"	3.340"	67.0	2,686 fps	47,000 CUP	72.0C	2,825 fps	53,100 CUP
	AR2217	.308"	3.340"	74.0	2,725 fps	45,500 CUP	79.0C	2,883 fps	52,800 CUP
	AR2225	.308"	3.340"	79.0	2,798 fps	45,700 CUP	84.0C	2,962 fps	52,300 CUP
208 GR. HDY A-MAX	AR2209	.308"	3.420"	60.4	2,655 fps	53,600 PSI	65.7	2,813 fps	62,000 PSI
	AR2213SC	.308"	3.420"	66.5	2,671 fps	53,200 PSI	72.3	2,838 fps	62,000 PSI
	AR2217	.308"	3.420"	71.7	2,650 fps	47,800 PSI	78.0C	2,869 fps	60,200 PSI
	AR2225	.308"	3.420"	74.5	2,717 fps	50,300 PSI	81.0C	2,915 fps	61,300 PSI
220 GR. SIE RN	AR2209	.308"	3.340"	61.0	2,501 fps	46,100 CUP	65.0	2,622 fps	52,300 CUP
	AR2213SC	.308"	3.340"	66.0	2,533 fps	44,900 CUP	71.0	2,685 fps	53,100 CUP
	AR2217	.308"	3.340"	73.0	2,588 fps	44,500 CUP	78.0	2,750 fps	52,000 CUP
	AR2225	.308"	3.340"	76.0	2,646 fps	44,400 CUP	81.0C	2,810 fps	52,400 CUP
230 GR. BER TACT	AR2213SC	.308"	3.395"	64.1	2,527 fps	50,800 PSI	70.3	2,710 fps	61,200 PSI

RIFLE DATA

300 Winchester Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LR			Barrel length: 24" Trim length: 2.610"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2217	.308"	3.395"	69.1	2,471 fps	44,200 PSI	76.0C	2,721 fps	58,200 PSI
	AR2225	.308"	3.395"	71.6	2,520 fps	44,700 PSI	77.0C	2,714 fps	55,200 PSI
300 Weatherby Magnum				Case: Remington Twist: 1:10" Primer: Federal 215M			Barrel length: 24" Trim length: 2.810"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. SIE SP	AR2208	.308"	3.475"	65.0	3,386 fps	49,500 CUP	69.0	3,492 fps	53,700 CUP
	AR2209	.308"	3.475"	77.0	3,347 fps	46,300 CUP	82.5	3,547 fps	53,200 CUP
	AR2213SC	.308"	3.475"	84.0	3,322 fps	46,000 CUP	90.0C	3,527 fps	53,100 CUP
130 GR. BAR XLC BT	AR2209	.308"	3.500"	78.0	3,287 fps	46,300 CUP	83.0	3,485 fps	52,800 CUP
	AR2213SC	.308"	3.500"	84.0	3,306 fps	46,200 CUP	89.5C	3,467 fps	53,000 CUP
150 GR. BAR TSX	Trail Boss	.308"	3.580"	19.0	1,334 fps	20,300 CUP	27.5	1,656 fps	28,900 CUP
	AR2206H	.308"	3.570"	57.0	2,926 fps	42,200 CUP	61.5	3,112 fps	54,100 CUP
	AR2208	.308"	3.570"	59.0	2,935 fps	42,200 CUP	64.5	3,155 fps	54,000 CUP
	AR2209	.308"	3.570"	70.0	3,084 fps	44,700 CUP	76.5	3,310 fps	53,800 CUP
	AR2213SC	.308"	3.570"	77.0	3,031 fps	45,200 CUP	84.0C	3,275 fps	52,900 CUP
	AR2217	.308"	3.570"	83.0	3,056 fps	43,500 CUP	88.0C	3,220 fps	49,900 CUP
165 GR. NOS BT	AR2206H	.308"	3.560"	58.0	2,871 fps	48,000 CUP	62.5	3,028 fps	54,200 CUP
	AR2208	.308"	3.560"	58.0	2,873 fps	46,300 CUP	62.0	3,033 fps	54,200 CUP
	AR2209	.308"	3.560"	69.0	2,908 fps	45,400 CUP	74.0	3,074 fps	54,100 CUP
	AR2213SC	.308"	3.560"	75.0	2,934 fps	46,400 CUP	80.2	3,113 fps	54,000 CUP
	AR2217	.308"	3.560"	84.0	3,014 fps	45,600 CUP	89.7C	3,216 fps	54,200 CUP
168 GR. NOS E-TIP	AR2206H	.308"	3.590"	55.0	2,773 fps	47,000 CUP	60.0	2,968 fps	54,500 CUP
	AR2208	.308"	3.590"	59.0	2,854 fps	48,000 CUP	63.5	2,999 fps	53,800 CUP
	AR2209	.308"	3.590"	66.0	2,898 fps	46,900 CUP	72.5	3,099 fps	53,800 CUP
	AR2213SC	.308"	3.590"	74.0	2,865 fps	43,700 CUP	81.0C	3,107 fps	54,200 CUP
	AR2217	.308"	3.590"	82.0	2,959 fps	44,100 CUP	88.0C	3,197 fps	53,700 CUP
180 GR. NOS E-TIP	AR2209	.308"	3.590"	64.0	2,783 fps	47,100 CUP	70.0	2,968 fps	54,100 CUP
	AR2213SC	.308"	3.590"	71.0	2,772 fps	46,700 CUP	78.0	2,977 fps	53,300 CUP
	AR2217	.308"	3.590"	79.0	2,861 fps	46,300 CUP	85.0C	3,054 fps	53,900 CUP
180 GR. SPR BTSP	AR2209	.308"	3.560"	69.0	2,876 fps	44,600 CUP	73.5	3,022 fps	54,000 CUP
	AR2213SC	.308"	3.560"	76.0	2,910 fps	45,300 CUP	81.5	3,096 fps	54,000 CUP
	AR2217	.308"	3.560"	83.0	2,971 fps	43,800 CUP	88.5C	3,151 fps	53,500 CUP
180 GR. WIN FS	AR2209	.308"	3.560"	67.0	2,813 fps	46,500 CUP	72.0	2,974 fps	54,600 CUP
	AR2213SC	.308"	3.560"	74.0	2,892 fps	50,200 CUP	79.0	3,013 fps	54,600 CUP
	AR2217	.308"	3.560"	78.0	2,921 fps	47,800 CUP	83.0C	3,111 fps	54,600 CUP
200 GR. NOS AB	AR2213SC	.308"	3.590"	70.0	2,702 fps	49,300 CUP	75.0	2,839 fps	54,400 CUP
	AR2217	.308"	3.590"	77.0	2,709 fps	45,800 CUP	83.0C	2,884 fps	53,700 CUP
	AR2225	.308"	3.590"	79.0	2,753 fps	45,800 CUP	84.5C	2,942 fps	53,100 CUP
200 GR. SFT	AR2209	.308"	3.510"	66.0	2,706 fps	45,800 CUP	71.0	2,866 fps	54,300 CUP
	AR2213SC	.308"	3.510"	72.0	2,708 fps	44,700 CUP	77.5	2,869 fps	52,900 CUP
	AR2217	.308"	3.510"	79.0	2,766 fps	43,200 CUP	85.0C	2,963 fps	53,400 CUP
	AR2225	.308"	3.510"	80.0	2,764 fps	46,100 CUP	85.5C	2,981 fps	54,400 CUP
220 GR. HDY RN	AR2209	.308"	3.565"	66.0	2,599 fps	45,900 CUP	70.0	2,725 fps	53,800 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

300 Weatherby Magnum				Case: Remington Twist: 1:10" Primer: Federal 215M			Barrel length: 24" Trim length: 2.810"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2213SC	.308"	3.565"	71.0	2,630 fps	47,200 CUP	75.7	2,766 fps	54,500 CUP
	AR2217	.308"	3.565"	77.0	2,670 fps	45,100 CUP	82.5	2,833 fps	53,400 CUP
	AR2225	.308"	3.565"	79.0	2,679 fps	45,900 CUP	84.0C	2,853 fps	54,000 CUP
300 Remington Ultra Mag				Case: Remington Twist: 1:10" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
130 GR. BAR XLC BT	AR2209	.308"	3.550"	87.0	3,436 fps	54,000 PSI	93.0	3,638 fps	63,000 PSI
	AR2213SC	.308"	3.550"	93.0	3,330 fps	51,200 PSI	99.5	3,579 fps	62,800 PSI
	AR2217	.308"	3.550"	100.0	3,349 fps	50,900 PSI	107.0C	3,615 fps	63,500 PSI
140 GR. BAR XBT	AR2213SC	.308"	3.555"	87.0	3,258 fps	55,100 PSI	93.0	3,447 fps	63,600 PSI
	AR2217	.308"	3.555"	95.0	3,326 fps	56,900 PSI	101.0	3,470 fps	63,100 PSI
	AR2225	.308"	3.555"	97.0	3,282 fps	52,100 PSI	103.5C	3,493 fps	61,400 PSI
150 GR. SIE SPBT	AR2213SC	.308"	3.530"	90.0	3,243 fps	55,100 PSI	94.0	3,408 fps	62,900 PSI
	AR2217	.308"	3.530"	98.0	3,258 fps	53,100 PSI	102.0	3,457 fps	62,900 PSI
	AR2225	.308"	3.530"	100.0	3,343 fps	52,600 PSI	106.0C	3,531 fps	60,800 PSI
165 GR. SFT SP	AR2213SC	.308"	3.530"	85.0	3,057 fps	52,300 PSI	90.0	3,255 fps	62,100 PSI
	AR2217	.308"	3.530"	94.0	3,135 fps	53,300 PSI	98.0	3,321 fps	62,500 PSI
	AR2225	.308"	3.530"	97.0	3,241 fps	54,200 PSI	103.0C	3,414 fps	62,300 PSI
180 GR. BAR TTSX BT	AR2213SC	.308"	3.600"	72.8	2,837 fps	49,700 PSI	77.5	3,010 fps	59,100 PSI
	AR2217	.308"	3.600"	74.5	2,891 fps	55,000 PSI	81.0	3,067 fps	63,500 PSI
	AR2225	.308"	3.600"	80.1	3,012 fps	56,700 PSI	87.0	3,130 fps	61,400 PSI
	AR2218	.308"	3.600"	82.4	2,836 fps	51,700 PSI	89.6	3,031 fps	61,900 PSI
180 GR. SPR SPBT	AR2213SC	.308"	3.530"	84.0	2,997 fps	54,000 PSI	89.0	3,167 fps	62,500 PSI
	AR2217	.308"	3.530"	91.0	3,018 fps	52,300 PSI	96.0	3,218 fps	62,800 PSI
	AR2225	.308"	3.530"	94.0	3,182 fps	58,400 PSI	100.5C	3,300 fps	62,400 PSI
	AR2218	.308"	3.530"	103.0	3,005 fps	53,700 PSI	108.0C	3,159 fps	62,100 PSI
190 GR. HDY SPBT	AR2213SC	.308"	3.555"	80.0	2,892 fps	53,000 PSI	85.0	3,069 fps	62,500 PSI
	AR2217	.308"	3.555"	88.0	2,971 fps	54,900 PSI	93.0	3,130 fps	63,500 PSI
	AR2225	.308"	3.555"	90.0	3,069 fps	56,500 PSI	96.0	3,204 fps	62,500 PSI
	AR2218	.308"	3.555"	100.0	2,938 fps	54,900 PSI	105.0C	3,085 fps	63,000 PSI
200 GR. BAR XFB	AR2217	.308"	3.555"	80.0	2,767 fps	57,400 PSI	83.0	2,850 fps	62,800 PSI
	AR2225	.308"	3.555"	81.0	2,852 fps	56,200 PSI	86.0	2,988 fps	62,800 PSI
	AR2218	.308"	3.555"	92.0	2,767 fps	56,100 PSI	98.0C	2,910 fps	63,100 PSI
200 GR. NOS AB	AR2213SC	.308"	3.600"	79.0	2,787 fps	54,700 PSI	85.0	2,953 fps	63,600 PSI
	AR2217	.308"	3.600"	87.0	2,839 fps	56,000 PSI	92.5	2,975 fps	62,800 PSI
	AR2225	.308"	3.600"	89.0	2,904 fps	56,400 PSI	95.5C	3,048 fps	62,400 PSI
	AR2218	.308"	3.600"	96.0	2,762 fps	49,700 PSI	102.0C	2,950 fps	58,900 PSI
220 GR. NOS PART	AR2217	.308"	3.530"	83.0	2,704 fps	54,500 PSI	89.0	2,863 fps	63,500 PSI
	AR2225	.308"	3.530"	84.0	2,800 fps	56,600 PSI	89.0	2,905 fps	61,900 PSI
	AR2218	.308"	3.530"	95.0	2,699 fps	54,000 PSI	100.5C	2,850 fps	62,500 PSI

RIFLE DATA

30-378 Weatherby				Case: Weatherby Twist: 1:10" Primer: Federal 215M			Barrel length: 26" Trim length: 2.903"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. SIE SPBT	AR2213SC	.308"	3.600"	100.0	3,449 fps	49,100 CUP	104.0	3,555 fps	53,900 CUP
	AR2217	.308"	3.600"	110.0	3,464 fps	46,000 CUP	114.0	3,598 fps	52,400 CUP
	AR2225	.308"	3.600"	113.0	3,490 fps	44,900 CUP	119.0C	3,690 fps	52,400 CUP
165 GR. SFT SP	AR2213SC	.308"	3.600"	95.0	3,202 fps	46,600 CUP	100.5	3,391 fps	53,800 CUP
	AR2217	.308"	3.600"	106.0	3,285 fps	45,500 CUP	112.0	3,495 fps	55,000 CUP
	AR2225	.308"	3.600"	109.0	3,305 fps	42,800 CUP	116.0C	3,559 fps	53,400 CUP
168 GR. NOS E-TIP	AR2213SC	.308"	3.740"	93.0	3,152 fps	46,400 CUP	101.0	3,341 fps	52,400 CUP
	AR2217	.308"	3.740"	97.5	3,094 fps	43,800 CUP	106.0	3,341 fps	53,400 CUP
	AR2225	.308"	3.740"	98.0	3,127 fps	43,500 CUP	109.0C	3,444 fps	51,600 CUP
180 GR. NOS E-TIP	AR2213SC	.308"	3.740"	92.1	3,092 fps	46,700 CUP	98.0	3,222 fps	52,600 CUP
	AR2217	.308"	3.740"	95.7	3,033 fps	45,100 CUP	104.0	3,282 fps	52,600 CUP
	AR2225	.308"	3.740"	96.5	3,087 fps	46,000 CUP	106.0C	3,336 fps	53,900 CUP
	AR2218	.308"	3.740"	105.3	2,958 fps	41,700 CUP	117.0	3,237 fps	50,400 CUP
180 GR. SPR SPBT	AR2213SC	.308"	3.600"	94.0	3,134 fps	46,600 CUP	100.0	3,301 fps	54,500 CUP
	AR2217	.308"	3.600"	105.0	3,213 fps	45,200 CUP	111.0	3,412 fps	54,300 CUP
	AR2225	.308"	3.600"	107.0	3,228 fps	43,200 CUP	113.0C	3,460 fps	54,700 CUP
	AR2218	.308"	3.600"	116.0	3,089 fps	40,400 CUP	120.0C	3,229 fps	47,100 CUP
190 GR. HDY SPBT	AR2217	.308"	3.625"	102.0	3,154 fps	46,500 CUP	108.0	3,316 fps	54,800 CUP
	AR2225	.308"	3.625"	105.0	3,154 fps	43,600 CUP	111.5C	3,374 fps	54,500 CUP
	AR2218	.308"	3.625"	115.0	3,113 fps	45,700 CUP	120.0C	3,243 fps	50,900 CUP
200 GR. NOS AB	AR2217	.308"	3.650"	95.0	2,966 fps	46,100 CUP	101.5	3,130 fps	53,800 CUP
	AR2225	.308"	3.650"	98.0	2,992 fps	44,900 CUP	105.0C	3,209 fps	52,600 CUP
	AR2218	.308"	3.650"	106.0	2,958 fps	43,700 CUP	113.0C	3,142 fps	49,600 CUP
200 GR. BAR XFB	AR2218	.308"	3.645"	111.0	3,134 fps	52,300 CUP	117.0C	3,227 fps	54,800 CUP
220 GR. NOS PART	AR2217	.308"	3.600"	99.0	2,965 fps	47,800 CUP	104.0	3,084 fps	53,700 CUP
	AR2225	.308"	3.600"	101.0	2,954 fps	44,700 CUP	107.5	3,155 fps	55,000 CUP
	AR2218	.308"	3.600"	115.0	3,047 fps	48,300 CUP	118.5C	3,145 fps	53,700 CUP
7.62 x 39mm Russian				Case: Midway Twist: 1:9.45" Primer: CCI 200			Barrel length: 24" Trim length: 1.518"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
108 GR. BAR RRLP FB	AR2207	.310"	2.210"	23.3	2,155 fps	38,300 CUP	25.0	2,310 fps	42,300 CUP
	AR2219	.310"	2.210"	25.7	1,974 fps	34,500 CUP	28.5C	2,199 fps	41,200 CUP
	Bench Mark 2	.310"	2.210"	25.0	1,826 fps	32,200 CUP	28.5C	2,118 fps	38,700 CUP
125 GR. SPR SP	AR2207	.311"	2.150"	24.5	2,190 fps	34,200 CUP	26.5	2,378 fps	40,400 CUP
	AR2219	.311"	2.150"	28.0	2,210 fps	32,900 CUP	29.0	2,323 fps	35,400 CUP
	AR2206H	.311"	2.150"	28.0	2,171 fps	29,900 CUP	29.0	2,249 fps	33,600 CUP
150 GR. HDY SP	AR2207	.312"	2.220"	22.5	1,947 fps	33,600 CUP	24.5	2,122 fps	39,800 CUP
	AR2219	.312"	2.220"	27.0	2,084 fps	34,200 CUP	28.5	2,192 fps	40,400 CUP
	AR2206H	.312"	2.220"	27.0	2,080 fps	33,600 CUP	28.0	2,154 fps	39,300 CUP

RIFLE DATA

310 Cadet (Martini Action)				Case:			Barrel length: 22"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. LEAD	AR2205	-	-	-	-	-	11.0	1,500 fps	-
120 GR.	AR2205	-	-	-	-	-	9.0	1,270 fps	-
32-20 Winchester (32-20 WCF)				Case:			Barrel length: 24"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
80 GR.	AR2205	-	-	-	-	-	16.0	2,150 fps	-
100 GR.	AR2205	-	-	-	-	-	14.0	1,950 fps	-
115 GR. LEAD	AP70N	-	-	-	-	-	4.0	1,260 fps	-
115 GR.	AR2205	-	-	-	-	-	13.0	1,800 fps	-
125 GR LEAD	AP70N	-	-	-	-	-	3.7	1,225 fps	-
7.7 x 58mm Japanese				Case: Norma			Barrel length: 26"		
				Twist: 1:9.75"			Trim length: 2.260"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. SIE SP	AR2206H	.311"	3.050"	41.0	2,337 fps	-	44.0	2,529 fps	-
	AR2209	.311"	3.050"	48.0	2,330 fps	-	51.0	2,514 fps	-
	AR2213SC	.311"	3.050"	50.0	2,180 fps	-	55.0	2,445 fps	-
180 GR. SIE SP	AR2206H	.311"	3.150"	37.0	2,060 fps	-	40.0	2,230 fps	-
	AR2209	.311"	3.150"	44.0	2,090 fps	-	47.0	2,309 fps	-
	AR2213SC	.311"	3.150"	46.0	2,011 fps	-	50.0	2,233 fps	-
303 British				Case: Remington			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.212"		
				Primer: Federal 210					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. SPR SP	Bench Mark 8208	.311"	2.915"	39.0	2,708 fps	38,400 CUP	43.0	2,886 fps	43,100 CUP
125 GR.	AR2206	-	-	42.0	2,635 fps	-	46.0C	2,880 fps	-
125 GR. SPR SP	AR2206H	.311"	2.915"	41.0	2,791 fps	42,400 CUP	45.0	2,931 fps	43,700 CUP
	AR2208	.311"	2.915"	45.0	2,766 fps	39,200 CUP	48.0	2,883 fps	42,100 CUP
150 GR. HDY SP	Bench Mark 8208	.312"	2.995"	34.0	2,392 fps	37,700 CUP	36.7	2,515 fps	41,300 CUP
150 GR.	AR2206	-	-	36.0	2,440 fps	-	39.5	2,620 fps	-
150 GR. HDY SP	AR2206H	.312"	2.995"	36.0	2,447 fps	40,300 CUP	40.0	2,627 fps	43,600 CUP
	AR2208	.312"	2.995"	39.0	2,458 fps	39,600 CUP	43.0	2,656 fps	42,700 CUP
174 GR.	AR2206	-	-	34.0	2,245 fps	-	37.5	2,515 fps	-
174 GR. SIE HPBT	AR2206H	.311"	3.075"	34.0	2,262 fps	38,800 CUP	38.0	2,446 fps	43,600 CUP
	AR2208	.311"	3.075"	38.0	2,345 fps	38,800 CUP	42.0	2,509 fps	43,800 CUP
	AR2209	.311"	3.075"	43.0	2,266 fps	35,400 CUP	48.0C	2,517 fps	41,900 CUP
180 GR. SIE SP	Bench Mark 8208	.311"	3.075"	31.0	2,108 fps	34,900 CUP	35.0	2,325 fps	43,300 CUP
180 GR.	AR2206	-	-	33.0	2,200 fps	-	37.5	2,390 fps	-
180 GR. SIE SP	AR2206H	.311"	3.075"	34.0	2,178 fps	35,200 CUP	38.0	2,400 fps	43,500 CUP

RIFLE DATA

303 British				Case: Remington Twist: 1:10" Primer: Federal 210			Barrel length: 24" Trim length: 2.212"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2208	.311"	3.075"	37.0	2,282 fps	38,200 CUP	41.0	2,440 fps	43,400 CUP
	AR2209	.311"	3.075"	44.0	2,295 fps	35,700 CUP	48.0C	2,500 fps	43,800 CUP
215 GR.	AR2206	-	-	35.0	2,080 fps	-	39.0	2,250 fps	-
7.65 x 53mm Mauser				Case: Norma Twist: 1:9.8" Primer: Federal 210			Barrel length: 29" Trim length: 2.080"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR.	AR2206	-	-	38.0	2,285 fps	-	42.0	2,565 fps	-
150 GR. HDY SP	AR2206H	.312"	2.815"	39.5	2,341 fps	-	43.0	2,597 fps	-
	AR2209	.312"	2.815"	45.0	2,347 fps	-	49.0	2,614 fps	-
174 GR.	AR2206	-	-	36.0	2,055 fps	-	38.5	2,325 fps	-
174 GR. HDY RN	AR2206H	.312"	2.850"	37.0	2,072 fps	-	40.0	2,351 fps	-
	AR2209	.312"	2.850"	43.0	2,266 fps	-	47.0	2,454 fps	-
	AR2213SC	.312"	2.850"	-	-	-	53.0	2,456 fps	-
32 Winchester Special				Case: Winchester Twist: 1:16" Primer: CCI 200			Barrel length: 20" Trim length: 2.030"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
170 GR. HDY JFP	AR2219	.321"	2.565"	30.0	2,111 fps	32,100 CUP	32.3	2,263 fps	36,800 CUP
	Bench Mark 2	.321"	2.565"	30.0	2,005 fps	29,900 CUP	32.5	2,175 fps	36,600 CUP
170 GR.	AR2206	-	-	31.0	1,965 fps	-	33.0	2,200 fps	-
170 GR. HDY JFP	AR2206H	.321"	2.565"	32.0	2,122 fps	30,800 CUP	34.5	2,283 fps	36,100 CUP
	AR2208	.321"	2.565"	34.0	2,096 fps	30,800 CUP	37.0C	2,271 fps	36,400 CUP
32-40 Winchester				Case: Winchester Twist: 1:16" Primer: Remington 2 1/2			Barrel length: 24" Trim length: 2.120"		
NOTE: See Single Action Rifle section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
170 GR.	AR2207	-	-	-	-	-	19.0	1,650 fps	-
	AR2206	-	-	-	-	-	26.0	1,825 fps	-

RIFLE DATA

8 x 57mm Mauser				Case: Remington Twist: 1:9.5" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.230"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR. HDY SP	Bench Mark 2	.323"	2.880"	43.5	2,728 fps	36,400 CUP	49.8	3,068 fps	49,700 CUP
	Bench Mark 8208	.323"	2.880"	48.0	2,907 fps	41,500 CUP	52.2	3,139 fps	48,700 CUP
	AR2206H	.323"	2.880"	47.0	2,843 fps	37,300 CUP	53.5	3,208 fps	49,400 CUP
	AR2208	.323"	2.880"	47.0	2,730 fps	36,600 CUP	54.0	3,092 fps	48,100 CUP
150 GR. HDY SP	Bench Mark 2	.323"	2.950"	42.5	2,577 fps	36,900 CUP	47.5	2,860 fps	48,800 CUP
	Bench Mark 8208	.323"	2.950"	44.1	2,648 fps	40,600 CUP	48.0	2,861 fps	48,300 CUP
	AR2206H	.323"	2.950"	44.0	2,619 fps	37,200 CUP	51.0	2,987 fps	49,500 CUP
	AR2208	.323"	2.950"	45.5	2,561 fps	37,500 CUP	52.4C	2,896 fps	49,000 CUP
160 GR. BAR TTSX BT	Bench Mark 2	.323"	3.010"	43.1	2,558 fps	42,500 CUP	46.6	2,726 fps	49,300 CUP
	Bench Mark 8208	.323"	3.010"	42.0	2,486 fps	37,200 CUP	46.5C	2,758 fps	48,300 CUP
	AR2206H	.323"	3.010"	44.0	2,603 fps	39,200 CUP	48.5C	2,821 fps	47,700 CUP
	AR2208	.323"	3.010"	45.0	2,503 fps	36,100 CUP	49.0C	2,727 fps	43,600 CUP
170 GR. HDY RN	Bench Mark 2	.323"	2.825"	41.0	2,397 fps	37,100 CUP	46.6	2,679 fps	49,100 CUP
	Bench Mark 8208	.323"	2.825"	44.2	2,575 fps	41,400 CUP	47.0	2,696 fps	48,000 CUP
	AR2206H	.323"	2.825"	40.0	2,306 fps	37,400 CUP	49.0	2,769 fps	48,700 CUP
	AR2208	.323"	2.825"	43.0	2,362 fps	36,700 CUP	50.5	2,700 fps	48,700 CUP
175 GR. SIE SP	Bench Mark 2	.323"	3.100"	41.0	2,414 fps	37,100 CUP	46.2	2,657 fps	48,400 CUP
	Bench Mark 8208	.323"	3.100"	43.7	2,537 fps	41,400 CUP	46.5	2,667 fps	46,600 CUP
	AR2206H	.323"	3.100"	40.0	2,387 fps	36,800 CUP	49.4	2,762 fps	48,300 CUP
	AR2208	.323"	3.100"	43.0	2,418 fps	37,200 CUP	50.5	2,716 fps	48,500 CUP
180 GR. BAR TSX	Bench Mark 2	.323"	2.960"	34.0	2,104 fps	37,200 CUP	42.0	2,466 fps	48,800 CUP
	Bench Mark 8208	.323"	2.960"	41.8	2,459 fps	43,300 CUP	44.5	2,572 fps	48,300 CUP
	AR2206H	.323"	2.960"	39.0	2,259 fps	36,800 CUP	46.0C	2,565 fps	48,700 CUP
	AR2208	.323"	2.960"	41.0	2,256 fps	35,800 CUP	47.8C	2,570 fps	48,400 CUP
180 GR. NOS BT	Bench Mark 2	.323"	3.020"	39.0	2,304 fps	36,800 CUP	44.5	2,586 fps	48,900 CUP
	Bench Mark 8208	.323"	3.020"	43.0	2,479 fps	41,300 CUP	45.7	2,619 fps	47,900 CUP
	AR2206H	.323"	3.020"	41.0	2,387 fps	36,300 CUP	47.7	2,691 fps	49,300 CUP
	AR2208	.323"	3.020"	42.0	2,309 fps	36,600 CUP	48.8	2,641 fps	49,400 CUP
200 GR. SPR SP	Bench Mark 8208	.323"	2.970"	41.4	2,325 fps	39,900 CUP	44.0	2,459 fps	47,600 CUP
	AR2206H	.323"	2.970"	38.0	2,240 fps	36,800 CUP	45.4	2,539 fps	49,200 CUP
	AR2208	.323"	2.970"	40.5	2,183 fps	36,900 CUP	47.5	2,511 fps	49,100 CUP
	AR2209	.323"	2.970"	49.0	2,276 fps	35,900 CUP	54.0C	2,522 fps	44,800 CUP
220 GR. HDY SP	Bench Mark 8208	.323"	2.970"	41.5	2,249 fps	40,000 CUP	44.1	2,348 fps	47,500 CUP
	AR2206H	.323"	2.970"	40.0	2,178 fps	37,200 CUP	45.2	2,420 fps	48,800 CUP
	AR2208	.323"	2.970"	39.0	2,055 fps	36,800 CUP	46.8	2,390 fps	48,800 CUP

RIFLE DATA

8 x 68mm Schuler				Case:			Barrel length: 26"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
125 GR.	AR2209	-	-	-	-	-	73.0	3,300 fps	-
150 GR.	AR2209	-	-	-	-	-	70.0	3,100 fps	-
170 GR.	AR2209	-	-	-	-	-	68.0	2,950 fps	-
220 GR.	AR2209	-	-	-	-	-	62.0	2,650 fps	-

325 Winchester Short Magnum				Case: Winchester			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.090"		
				Primer: Winchester LRM					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. HDY SP	Bench Mark 2	.323"	2.810"	57.0	3,074 fps	50,200 PSI	60.5	3,253 fps	62,400 PSI
	Bench Mark 8208	.323"	2.810"	56.1	3,059 fps	55,400 PSI	59.7	3,171 fps	61,000 PSI
	AR2206H	.323"	2.810"	60.0	3,156 fps	53,600 PSI	63.5	3,313 fps	63,300 PSI
	AR2208	.323"	2.810"	61.0	3,137 fps	54,200 PSI	65.0	3,305 fps	63,600 PSI
	AR2209	.323"	2.810"	69.0	3,138 fps	51,600 PSI	73.5C	3,345 fps	63,700 PSI
	AR2213SC	.323"	2.810"	71.0	2,945 fps	44,100 PSI	75.0C	3,115 fps	52,800 PSI
175 GR. SIE SP	Bench Mark 2	.323"	2.855"	51.0	2,743 fps	54,000 PSI	53.7	2,863 fps	62,700 PSI
	Bench Mark 8208	.323"	2.855"	52.6	2,793 fps	54,300 PSI	56.0	2,923 fps	62,800 PSI
	AR2206H	.323"	2.855"	57.5	2,858 fps	54,100 PSI	61.0	3,000 fps	62,900 PSI
	AR2208	.323"	2.855"	58.0	2,862 fps	55,400 PSI	61.0	2,975 fps	62,300 PSI
	AR2209	.323"	2.855"	64.5	2,835 fps	51,100 PSI	68.0C	3,024 fps	63,400 PSI
	AR2213SC	.323"	2.855"	70.0	2,819 fps	51,400 PSI	73.0C	2,960 fps	61,400 PSI
180 GR. NOS BT	Bench Mark 8208	.323"	2.840"	51.5	2,743 fps	54,900 PSI	54.8	2,855 fps	60,800 PSI
	AR2206H	.323"	2.840"	52.5	2,732 fps	55,100 PSI	54.6	2,820 fps	60,300 PSI
	AR2208	.323"	2.840"	55.0	2,770 fps	56,500 PSI	58.0	2,873 fps	62,700 PSI
	AR2209	.323"	2.840"	61.8	2,794 fps	52,500 PSI	65.5	2,957 fps	62,200 PSI
	AR2213SC	.323"	2.840"	62.0	2,776 fps	52,900 PSI	65.8C	2,930 fps	62,800 PSI
195 GR. HDY SP	Bench Mark 8208	.323"	2.855"	50.3	2,617 fps	55,900 PSI	53.5	2,728 fps	62,600 PSI
	AR2206H	.323"	2.855"	53.0	2,648 fps	55,000 PSI	56.0	2,763 fps	62,500 PSI
	AR2208	.323"	2.855"	54.0	2,661 fps	55,500 PSI	57.3	2,782 fps	62,800 PSI
	AR2209	.323"	2.855"	61.0	2,712 fps	54,400 PSI	64.5	2,837 fps	62,300 PSI
	AR2213SC	.323"	2.855"	66.3	2,704 fps	54,600 PSI	70.5C	2,835 fps	63,000 PSI
200 GR. BAR XLC	AR2206H	.323"	2.860"	54.0	2,662 fps	58,400 PSI	57.3	2,739 fps	62,200 PSI
	AR2208	.323"	2.860"	55.5	2,642 fps	55,100 PSI	59.0	2,762 fps	62,300 PSI
	AR2209	.323"	2.860"	63.0	2,689 fps	52,500 PSI	67.0	2,843 fps	62,900 PSI
220 GR. SFT SP	AR2206H	.323"	2.845"	49.5	2,438 fps	54,800 PSI	52.5	2,556 fps	63,100 PSI
	AR2208	.323"	2.845"	50.8	2,448 fps	55,800 PSI	54.0	2,569 fps	62,400 PSI
	AR2209	.323"	2.845"	58.3	2,518 fps	52,700 PSI	62.0	2,649 fps	62,400 PSI
	AR2213SC	.323"	2.845"	63.0	2,491 fps	52,200 PSI	67.0C	2,638 fps	61,300 PSI

RIFLE DATA

8mm Remington Magnum				Case: Remington			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.840"		
				Primer: Remington 9 1/2M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
150 GR. SPR SP	AR2208	.323"	3.550"	71.0	3,253 fps	46,100 CUP	75.0	3,403 fps	52,600 CUP
	AR2209	.323"	3.550"	79.0	3,242 fps	45,700 CUP	83.5	3,401 fps	52,500 CUP
	AR2213SC	.323"	3.550"	88.0	3,268 fps	47,200 CUP	92.0C	3,378 fps	51,500 CUP
175 GR. SIE SP	AR2209	.323"	3.600"	72.0	2,930 fps	45,300 CUP	77.0	3,141 fps	52,300 CUP
	AR2213SC	.323"	3.600"	81.0	3,031 fps	47,300 CUP	86.5	3,162 fps	52,800 CUP
180 GR. BAR TSX	AR2213SC	.323"	3.600"	73.0	2,858 fps	47,400 CUP	79.5	3,035 fps	52,000 CUP
	AR2217	.323"	3.600"	81.0	2,912 fps	46,100 CUP	89.0C	3,099 fps	52,400 CUP
200 GR. NOS PART	AR2209	.323"	3.600"	70.0	2,820 fps	47,300 CUP	74.0	2,950 fps	52,200 CUP
	AR2213SC	.323"	3.600"	77.0	2,819 fps	47,400 CUP	81.5	2,944 fps	52,000 CUP
	AR2217	.323"	3.600"	86.0	2,825 fps	45,300 CUP	89.0C	2,920 fps	48,100 CUP
220 GR. HDY SP	AR2209	.323"	3.600"	70.0	2,690 fps	48,200 CUP	74.0	2,824 fps	52,100 CUP
	AR2213SC	.323"	3.600"	76.0	2,685 fps	46,700 CUP	80.5	2,816 fps	52,100 CUP
	AR2217	.323"	3.600"	85.0	2,726 fps	46,700 CUP	88.0C	2,817 fps	49,300 CUP
338 Marlin Express				Case: Hornady			Barrel length: 24"		
				Twist: 1:12"			Trim length: 1.910"		
				Primer: Winchester LRM					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. HDY FTX	Bench Mark 2	.338"	2.590"	36.0	2,198 fps	42,200 PSI	38.2	2,281 fps	44,800 PSI
	Bench Mark 8208	.338"	2.590"	37.8	2,228 fps	40,700 PSI	40.2	2,322 fps	44,000 PSI
	AR2206H	.338"	2.590"	35.7	2,170 fps	38,900 PSI	38.0	2,309 fps	45,400 PSI
	AR2208	.338"	2.590"	40.0	2,224 fps	41,600 PSI	42.5	2,326 fps	44,600 PSI
338 Federal				Case: Federal			Barrel length: 24"		
				Twist: 1:10"			Trim length: 2.005"		
				Primer: Federal 210M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. BAR TTSX	AR2207	.338"	2.840"	40.2	2,756 fps	53,600 PSI	42.8	2,884 fps	61,500 PSI
	AR2219	.338"	2.840"	44.6	2,761 fps	52,400 PSI	48.5C	2,937 fps	61,800 PSI
	Bench Mark 2	.338"	2.840"	45.1	2,725 fps	47,900 PSI	49.0C	2,894 fps	56,200 PSI
	Bench Mark 8208	.338"	2.840"	46.0	2,733 fps	46,500 PSI	50.0C	2,910 fps	54,700 PSI
180 GR. NOS AB	AR2219	.338"	2.810"	41.0	2,514 fps	46,000 PSI	45.5C	2,743 fps	59,700 PSI
	Bench Mark 2	.338"	2.810"	42.0	2,532 fps	47,900 PSI	47.0C	2,768 fps	61,300 PSI
	Bench Mark 8208	.338"	2.810"	44.6	2,641 fps	49,600 PSI	48.5C	2,811 fps	59,900 PSI
	AR2206H	.338"	2.810"	43.0	2,486 fps	42,400 PSI	47.0C	2,682 fps	50,800 PSI
185 GR. BAR TSX	AR2219	.338"	2.800"	39.0	2,447 fps	49,400 PSI	43.3C	2,645 fps	59,700 PSI
	Bench Mark 2	.338"	2.800"	39.0	2,416 fps	48,000 PSI	44.0C	2,637 fps	60,100 PSI
	Bench Mark 8208	.338"	2.800"	44.2	2,601 fps	51,800 PSI	47.0C	2,721 fps	59,500 PSI
	AR2206H	.338"	2.800"	42.0	2,456 fps	45,400 PSI	46.5C	2,690 fps	58,200 PSI
	AR2208	.338"	2.800"	42.0	2,364 fps	43,000 PSI	47.0C	2,607 fps	54,700 PSI
200 GR. HDY SP	AR2219	.338"	2.810"	40.0	2,412 fps	49,500 PSI	44.5	2,596 fps	59,300 PSI
	Bench Mark 2	.338"	2.810"	40.0	2,309 fps	43,200 PSI	45.0C	2,584 fps	59,700 PSI
	Bench Mark 8208	.338"	2.810"	44.0	2,504 fps	50,200 PSI	47.0C	2,657 fps	60,300 PSI
	AR2206H	.338"	2.810"	42.0	2,350 fps	42,600 PSI	47.0C	2,597 fps	55,100 PSI

RIFLE DATA

338 Federal				Case: Federal Twist: 1:10" Primer: Federal 210M			Barrel length: 24" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
210 GR. SFT SCIR	AR2208	.338"	2.810"	42.0	2,264 fps	40,400 PSI	47.0C	2,510 fps	52,100 PSI
	AR2219	.338"	2.820"	38.0	2,296 fps	45,900 PSI	42.3C	2,511 fps	59,200 PSI
	Bench Mark 2	.338"	2.820"	38.0	2,277 fps	45,900 PSI	43.0C	2,514 fps	60,800 PSI
	Bench Mark 8208	.338"	2.820"	40.7	2,402 fps	52,000 PSI	43.3C	2,508 fps	59,400 PSI
	AR2206H	.338"	2.820"	40.0	2,281 fps	41,600 PSI	45.0C	2,551 fps	58,100 PSI
	AR2208	.338"	2.820"	41.0	2,248 fps	42,000 PSI	46.0C	2,503 fps	56,500 PSI
215 GR. SIE SP	AR2219	.338"	2.810"	38.0	2,305 fps	50,400 PSI	43.0	2,504 fps	60,300 PSI
	Bench Mark 2	.338"	2.810"	39.0	2,286 fps	47,200 PSI	43.3	2,487 fps	60,000 PSI
	Bench Mark 8208	.338"	2.810"	41.9	2,396 fps	50,500 PSI	44.6	2,519 fps	59,400 PSI
	AR2206H	.338"	2.810"	41.0	2,297 fps	43,500 PSI	46.0C	2,539 fps	57,600 PSI
	AR2208	.338"	2.810"	41.0	2,216 fps	41,000 PSI	46.0C	2,452 fps	53,100 PSI
225 GR. SFT SP	AR2219	.338"	2.750"	37.0	2,204 fps	52,700 PSI	41.0	2,357 fps	60,000 PSI
	Bench Mark 2	.338"	2.750"	38.0	2,150 fps	46,600 PSI	42.8	2,365 fps	59,500 PSI
	Bench Mark 8208	.338"	2.750"	40.5	2,283 fps	52,400 PSI	43.1	2,394 fps	60,500 PSI
	AR2206H	.338"	2.750"	40.0	2,167 fps	42,900 PSI	45.3C	2,445 fps	60,000 PSI
	AR2208	.338"	2.750"	41.0	2,149 fps	43,100 PSI	46.0C	2,410 fps	57,900 PSI
338-06				Case: Winchester Twist: 1:10" Primer: CCI 200			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. BAR X	AR2219	.338"	3.150"	50.0	2,870 fps	55,200 PSI	55.0	3,074 fps	62,800 PSI
	Bench Mark 2	.338"	3.150"	51.0	2,859 fps	50,300 PSI	56.8	3,103 fps	63,600 PSI
	AR2206H	.338"	3.150"	53.0	2,901 fps	50,600 PSI	58.0C	3,112 fps	62,200 PSI
	AR2208	.338"	3.150"	56.0	2,924 fps	51,200 PSI	60.0C	3,063 fps	57,900 PSI
175 GR. BAR X	AR2219	.338"	3.130"	48.0	2,717 fps	49,700 PSI	52.2	2,902 fps	62,000 PSI
	Bench Mark 2	.338"	3.130"	49.0	2,731 fps	51,700 PSI	53.7	2,921 fps	63,100 PSI
	AR2206H	.338"	3.130"	51.0	2,774 fps	51,200 PSI	56.0	2,981 fps	63,300 PSI
	AR2208	.338"	3.130"	55.0	2,841 fps	55,100 PSI	59.0C	2,982 fps	63,000 PSI
180 GR. NOS BT	AR2219	.338"	3.250"	49.0	2,738 fps	52,000 PSI	53.0	2,916 fps	63,000 PSI
	Bench Mark 2	.338"	3.250"	50.0	2,763 fps	53,700 PSI	54.2	2,925 fps	63,400 PSI
	Bench Mark 8208	.338"	3.250"	48.0	2,681 fps	50,000 PSI	53.3	2,897 fps	63,000 PSI
	AR2206H	.338"	3.250"	51.0	2,735 fps	49,600 PSI	55.0	2,933 fps	62,700 PSI
	AR2208	.338"	3.250"	54.0	2,782 fps	51,000 PSI	58.5C	2,961 fps	62,000 PSI
185 GR. BAR XBT	AR2219	.338"	3.130"	47.0	2,669 fps	52,900 PSI	50.5	2,823 fps	62,400 PSI
	Bench Mark 2	.338"	3.130"	47.0	2,629 fps	50,400 PSI	51.3	2,826 fps	62,700 PSI
	AR2206H	.338"	3.130"	49.0	2,671 fps	51,000 PSI	53.5	2,865 fps	62,900 PSI
	AR2208	.338"	3.130"	52.0	2,723 fps	54,000 PSI	56.0	2,867 fps	62,300 PSI
185 GR. BAR TSX	Bench Mark 8208	.338"	3.250"	47.0	2,596 fps	50,800 PSI	52.0	2,797 fps	62,000 PSI
200 GR. HDY SP	AR2219	.338"	3.310"	47.0	2,583 fps	53,600 PSI	50.9	2,724 fps	61,900 PSI
	Bench Mark 2	.338"	3.310"	48.0	2,569 fps	52,400 PSI	52.2	2,725 fps	61,000 PSI
	Bench Mark 8208	.338"	3.310"	49.0	2,624 fps	55,200 PSI	52.8	2,751 fps	62,000 PSI
	AR2206H	.338"	3.310"	50.0	2,628 fps	52,900 PSI	54.0	2,787 fps	63,300 PSI
	AR2208	.338"	3.310"	52.0	2,622 fps	51,500 PSI	56.5	2,807 fps	63,100 PSI
	AR2209	.338"	3.310"	58.0	2,593 fps	47,800 PSI	62.0C	2,729 fps	54,300 PSI

C = Compressed Load: L = Lead Projectile

RIFLE DATA

338-06				Case: Winchester Twist: 1:10" Primer: CCI 200			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
210 GR. NOS PART	Bench Mark 8208	.338"	3.240"	45.0	2,457 fps	54,300 PSI	48.5	2,598 fps	61,500 PSI
	AR2206H	.338"	3.240"	47.0	2,480 fps	49,900 PSI	51.7	2,685 fps	62,900 PSI
	AR2208	.338"	3.240"	50.0	2,545 fps	52,400 PSI	53.9	2,701 fps	62,400 PSI
	AR2209	.338"	3.240"	58.0	2,598 fps	52,200 PSI	62.0C	2,753 fps	61,800 PSI
215 GR. SIE SBT	Bench Mark 8208	.338"	3.240"	46.0	2,459 fps	52,500 PSI	50.5	2,641 fps	63,400 PSI
	AR2206H	.338"	3.240"	48.0	2,503 fps	51,200 PSI	51.9	2,675 fps	62,600 PSI
	AR2208	.338"	3.240"	50.0	2,510 fps	50,200 PSI	54.5	2,700 fps	62,400 PSI
	AR2209	.338"	3.240"	58.0	2,573 fps	50,600 PSI	62.0C	2,727 fps	59,900 PSI
225 GR. SPR SPBT	Bench Mark 8208	.338"	3.240"	44.0	2,362 fps	52,700 PSI	48.3	2,532 fps	62,500 PSI
	AR2206H	.338"	3.240"	46.0	2,410 fps	51,200 PSI	49.8	2,577 fps	63,000 PSI
	AR2208	.338"	3.240"	48.0	2,441 fps	52,100 PSI	52.0	2,599 fps	62,700 PSI
	AR2209	.338"	3.240"	55.0	2,481 fps	52,100 PSI	59.5C	2,649 fps	62,700 PSI
250 GR. HDY SP	AR2208	.338"	3.300"	46.0	2,248 fps	51,300 PSI	50.0	2,405 fps	62,100 PSI
	AR2209	.338"	3.300"	55.0	2,366 fps	51,700 PSI	59.8	2,540 fps	63,400 PSI
338 Ruger Compact Magnum				Case: Hornady Twist: 1:10" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. BAR TTSX	Bench Mark 8208	.338"	2.830"	52.4	2,848 fps	45,800 PSI	57.0C	3,101 fps	62,900 PSI
	AR2206H	.338"	2.830"	52.0	2,858 fps	50,200 PSI	58.0C	3,117 fps	63,100 PSI
	AR2208	.338"	2.830"	53.0	2,771 fps	46,800 PSI	59.5C	3,067 fps	62,200 PSI
180 GR. NOS AB	Bench Mark 8208	.338"	2.830"	50.8	2,769 fps	52,600 PSI	54.6	2,919 fps	61,900 PSI
	AR2206H	.338"	2.830"	50.0	2,736 fps	52,200 PSI	55.0C	2,923 fps	61,200 PSI
	AR2208	.338"	2.830"	51.0	2,682 fps	50,000 PSI	56.7C	2,909 fps	62,200 PSI
185 GR. BAR TSX	Bench Mark 8208	.038"	2.800"	51.2	2,732 fps	53,400 PSI	54.5C	2,868 fps	62,700 PSI
	AR2206H	.338"	2.800"	50.0	2,649 fps	49,400 PSI	54.8C	2,852 fps	60,600 PSI
	AR2208	.338"	2.800"	51.0	2,602 fps	48,000 PSI	57.0C	2,867 fps	62,900 PSI
200 GR. HDY SP	Bench Mark 8208	.338"	2.830"	50.8	2,655 fps	55,300 PSI	54.0	2,759 fps	60,900 PSI
	AR2206H	.338"	2.830"	50.0	2,627 fps	55,400 PSI	55.3	2,803 fps	63,600 PSI
	AR2208	.338"	2.830"	51.0	2,572 fps	51,300 PSI	57.0C	2,798 fps	64,000 PSI
210 GR. SFT SCIR	AR2206H	.338"	2.830"	47.0	2,514 fps	54,200 PSI	52.0C	2,665 fps	60,800 PSI
	AR2208	.338"	2.830"	48.0	2,457 fps	49,800 PSI	53.0C	2,662 fps	62,300 PSI
215 GR. SIE SPBT	Bench Mark 8208	.338"	2.830"	48.4	2,540 fps	57,600 PSI	51.0	2,620 fps	61.5 PSI
	AR2206H	.338"	2.830"	46.0	2,460 fps	51,600 PSI	51.0	2,639 fps	61,900 PSI
	AR2208	.338"	2.830"	48.0	2,465 fps	52,000 PSI	53.5C	2,658 fps	62,900 PSI
225 GR. HDY IB	Bench Mark 8208	.338"	2.830"	48.2	2,465 fps	54,200 PSI	51.3	2,587 fps	62,600 PSI
	AR2206H	.338"	2.830"	47.0	2,465 fps	56,800 PSI	52.3	2,619 fps	63,300 PSI
	AR2208	.338"	2.830"	48.0	2,403 fps	50,500 PSI	53.3	2,601 fps	62,200 PSI
250 GR. SFT AF/SS	Bench Mark 8208	.338"	2.730"	44.9	2,258 fps	56,500 PSI	47.3	2,321 fps	59,400 PSI
	AR2206H	.338"	2.730"	41.0	2,158 fps	50,500 PSI	45.8C	2,355 fps	63,100 PSI
	AR2208	.338"	2.730"	44.0	2,192 fps	51,500 PSI	48.8C	2,352 fps	61,400 PSI

RIFLE DATA

338 Winchester Magnum				Case: Winchester Twist: 1:10" Primer: Winchester LRM			Barrel length: 24" Trim length: 2.490"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. BAR TTSX	Bench Mark 8208	.338"	3.325"	58.0	3,023 fps	47,000 CUP	64.0	3,198 fps	51,900 CUP
	AR2206H	.338"	3.325"	60.0	3,057 fps	45,000 CUP	67.0	3,271 fps	51,600 CUP
	AR2208	.338"	3.325"	62.0	2,984 fps	41,600 CUP	68.5	3,196 fps	51,100 CUP
180 GR. NOS BT	AR2206H	.338"	3.340"	58.0	2,893 fps	45,100 CUP	64.0	3,066 fps	52,300 CUP
	AR2208	.338"	3.340"	57.0	2,871 fps	45,500 CUP	63.5	3,087 fps	53,200 CUP
	AR2209	.338"	3.340"	69.0	2,928 fps	41,200 CUP	74.5	3,157 fps	52,200 CUP
	AR2213SC	.338"	3.340"	70.0	2,776 fps	35,200 CUP	78.0C	3,067 fps	49,100 CUP
185 GR. BAR TSX	AR2206H	.338"	3.290"	56.0	2,764 fps	46,600 CUP	59.5	2,901 fps	52,300 CUP
	AR2208	.338"	3.290"	60.0	2,831 fps	47,200 CUP	65.0	3,013 fps	52,900 CUP
	AR2209	.338"	3.290"	69.6	2,896 fps	47,500 CUP	74.0C	3,048 fps	52,800 CUP
200 GR. SPR SP	AR2206H	.338"	3.300"	56.0	2,702 fps	44,700 CUP	62.0	2,877 fps	52,600 CUP
	AR2208	.338"	3.300"	53.0	2,597 fps	39,100 CUP	58.5	2,805 fps	51,100 CUP
	AR2209	.338"	3.300"	65.0	2,695 fps	39,900 CUP	72.5	2,969 fps	52,200 CUP
	AR2213SC	.338"	3.300"	70.0	2,703 fps	41,300 CUP	77.5C	2,965 fps	52,400 CUP
210 GR. NOS PART	AR2206H	.338"	3.280"	54.0	2,609 fps	44,100 CUP	60.0	2,788 fps	53,000 CUP
	AR2208	.338"	3.280"	53.0	2,577 fps	41,800 CUP	58.5	2,784 fps	52,500 CUP
	AR2209	.338"	3.280"	63.0	2,618 fps	41,500 CUP	70.0	2,855 fps	51,800 CUP
	AR2213SC	.338"	3.280"	68.0	2,648 fps	42,600 CUP	75.5C	2,888 fps	52,300 CUP
225 GR. HDY SP	AR2206H	.338"	3.340"	53.0	2,505 fps	43,000 CUP	59.0	2,688 fps	52,400 CUP
	AR2208	.338"	3.340"	52.0	2,481 fps	41,500 CUP	57.5	2,680 fps	52,700 CUP
	AR2209	.338"	3.340"	63.0	2,571 fps	41,100 CUP	69.5	2,785 fps	51,700 CUP
	AR2213SC	.338"	3.340"	67.0	2,542 fps	40,200 CUP	74.5C	2,792 fps	52,000 CUP
250 GR. HDY SP	AR2209	.338"	3.340"	61.0	2,448 fps	42,000 CUP	67.5	2,657 fps	51,900 CUP
	AR2213SC	.338"	3.340"	64.0	2,424 fps	41,900 CUP	71.5C	2,655 fps	52,300 CUP
	AR2217	.338"	3.340"	72.0	2,512 fps	41,500 CUP	76.0C	2,622 fps	46,500 CUP
265 GR. BAR TTSX BT	AR2209	.338"	3.450"	55.8	2,287 fps	48,400 CUP	59.4	2,409 fps	52,200 CUP
	AR2213SC	.338"	3.450"	60.3	2,236 fps	44,000 CUP	67.0C	2,434 fps	52,500 CUP
275 GR. SPR SP	AR2209	.338"	3.340"	57.0	2,259 fps	41,100 CUP	63.5	2,447 fps	52,100 CUP
	AR2213SC	.338"	3.340"	62.0	2,304 fps	42,600 CUP	69.0	2,502 fps	52,300 CUP
	AR2217	.338"	3.340"	70.0	2,402 fps	43,400 CUP	76.0C	2,564 fps	51,100 CUP
300 GR. SIE HPBT	AR2209	.338"	3.340"	56.0	2,202 fps	44,000 CUP	61.5	2,362 fps	52,600 CUP
	AR2213SC	.338"	3.340"	63.0	2,255 fps	45,900 CUP	69.0C	2,422 fps	52,800 CUP
	AR2217	.338"	3.340"	66.0	2,241 fps	42,200 CUP	70.0C	2,347 fps	46,900 CUP
340 Weatherby Magnum				Case: Weatherby Twist: 1:10" Primer: Federal 215			Barrel length: 26" Trim length: 2.815"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. SPR SP	AR2209	.338"	3.560"	77.0	2,777 fps	-	80.0	2,994 fps	-
	AR2213SC	.338"	3.560"	85.0	2,837 fps	-	90.0	3,040 fps	-
225 GR. HDY SP	AR2209	.338"	3.655"	75.0	2,707 fps	-	78.0	2,866 fps	-
	AR2213SC	.338"	3.655"	81.0	2,620 fps	-	86.0	2,889 fps	-
250 GR. SIE SPBT	AR2209	.338"	3.560"	73.0	2,570 fps	-	76.0	2,724 fps	-
	AR2213SC	.338"	3.560"	78.0	2,487 fps	-	83.0	2,784 fps	-
275 GR. SPR SP	AR2209	.338"	3.560"	71.0	2,460 fps	-	74.0	2,575 fps	-

C = Compressed Load: L = Lead Projectile

RIFLE DATA

340 Weatherby Magnum				Case: Weatherby Twist: 1:10" Primer: Federal 215			Barrel length: 26" Trim length: 2.815"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2213SC	.338"	3.560"	75.0	2,377 fps	-	80.0	2,569 fps	-
338 Lapua Magnum				Case: Norma Twist: 1:9" Primer: Federal 215M			Barrel length: 24" Trim length: 2.714"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. BAR TTSX	AR2209	.338"	3.565"	89.3	3,348 fps	54,100 PSI	95.0	3,511 fps	61,800 PSI
	AR2213SC	.338"	3.565"	98.5	3,290 fps	52,900 PSI	104.8C	3,472 fps	61,200 PSI
185 GR. BAR TSX	AR2209	.338"	3.530"	85.0	3,120 fps	53,200 PSI	90.4	3,311 fps	63,400 PSI
	AR2213SC	.338"	3.530"	93.7	3,085 fps	52,500 PSI	100.0	3,281 fps	61,500 PSI
	AR2217	.338"	3.530"	100.0	3,051 fps	49,300 PSI	106.0C	3,218 fps	57,300 PSI
200 GR. SPR SP	AR2209	.338"	3.525"	79.0	2,925 fps	45,900 CUP	85.5	3,099 fps	52,500 CUP
	AR2213SC	.338"	3.525"	83.0	2,855 fps	44,900 CUP	92.0	3,086 fps	53,200 CUP
	AR2217	.338"	3.525"	92.0	2,854 fps	42,300 CUP	102.0C	3,116 fps	52,500 CUP
	AR2225	.338"	3.525"	96.0	2,928 fps	43,700 CUP	104.0C	3,189 fps	52,600 CUP
210 GR. NOS PART	AR2209	.338"	3.525"	76.0	2,834 fps	47,000 CUP	82.0	3,005 fps	52,200 CUP
	AR2213SC	.338"	3.525"	80.0	2,735 fps	44,600 CUP	89.0	3,006 fps	53,000 CUP
	AR2217	.338"	3.525"	90.0	2,800 fps	42,900 CUP	99.5	3,052 fps	52,500 CUP
	AR2225	.338"	3.525"	92.0	2,846 fps	42,100 CUP	102.0C	3,142 fps	52,600 CUP
215 GR. SIE SPBT	AR2209	.338"	3.550"	76.0	2,791 fps	45,000 CUP	84.0	3,015 fps	52,800 CUP
	AR2213SC	.338"	3.550"	82.0	2,763 fps	44,500 CUP	91.0	2,997 fps	53,000 CUP
	AR2217	.338"	3.550"	92.0	2,809 fps	43,500 CUP	102.0C	3,068 fps	53,000 CUP
	AR2225	.338"	3.550"	94.0	2,849 fps	43,700 CUP	104.0C	3,125 fps	51,900 CUP
225 GR. NOS PART	AR2209	.338"	3.550"	74.0	2,715 fps	45,200 CUP	82.5	2,936 fps	52,800 CUP
	AR2213SC	.338"	3.550"	80.0	2,699 fps	44,000 CUP	89.6	2,918 fps	52,900 CUP
	AR2217	.338"	3.550"	91.0	2,713 fps	42,100 CUP	101.0C	2,995 fps	53,100 CUP
	AR2225	.338"	3.550"	92.0	2,744 fps	41,200 CUP	102.0C	3,040 fps	52,300 CUP
250 GR. HDY SP	AR2209	.338"	3.550"	74.0	2,615 fps	48,300 CUP	78.0	2,742 fps	52,300 CUP
	AR2213SC	.338"	3.550"	79.0	2,600 fps	46,100 CUP	85.0	2,740 fps	52,200 CUP
	AR2217	.338"	3.550"	88.0	2,567 fps	41,400 CUP	98.0C	2,838 fps	52,800 CUP
	AR2225	.338"	3.550"	90.0	2,620 fps	43,200 CUP	98.0C	2,853 fps	52,000 CUP
265 GR. BAR TTSX BT	AR2213SC	.338"	3.685"	74.6	2,518 fps	54,400 PSI	79.4	2,642 fps	61,600 PSI
	AR2217	.338"	3.685"	77.7	2,510 fps	52,800 PSI	83.6	2,656 fps	61,100 PSI
	AR2225	.338"	3.685"	76.4	2,483 fps	50,400 PSI	83.0	2,660 fps	60,600 PSI
275 GR. SFT SP	AR2213SC	.338"	3.460"	71.0	2,349 fps	42,800 CUP	79.0	2,572 fps	52,800 CUP
	AR2217	.338"	3.460"	83.0	2,444 fps	43,500 CUP	91.5C	2,648 fps	52,600 CUP
	AR2225	.338"	3.460"	80.0	2,421 fps	41,800 CUP	89.0	2,671 fps	52,700 CUP
300 GR. SIE HPBT	AR2213SC	.338"	3.600"	71.0	2,307 fps	44,400 CUP	79.0	2,511 fps	53,100 CUP
	AR2217	.338"	3.600"	83.0	2,383 fps	43,200 CUP	92.0C	2,590 fps	53,000 CUP
	AR2225	.338"	3.600"	85.0	2,376 fps	41,100 CUP	94.0C	2,654 fps	53,400 CUP

RIFLE DATA

338 Remington Ultra Mag				Case: Remington Twist: 1:10" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.750"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
185 GR. BAR TSX	AR2209	.338"	3.550"	82.0	3,037 fps	51,400 PSI	89.0	3,274 fps	63.8 PSI
	AR2213SC	.338"	3.550"	91.0	3,040 fps	52,000 PSI	97.0	3,232 fps	62,100 PSI
	AR2217	.338"	3.550"	96.0	3,068 fps	52,300 PSI	102.0C	3,241 fps	61,500 PSI
200 GR. SPR SP	AR2209	.338"	3.590"	84.0	3,011 fps	55,400 PSI	89.5	3,156 fps	63,000 PSI
	AR2213SC	.338"	3.590"	91.0	2,979 fps	54,500 PSI	96.5	3,138 fps	63,000 PSI
	AR2217	.338"	3.590"	96.0	2,944 fps	48,300 PSI	102.0C	3,127 fps	58,600 PSI
210 GR. NOS PART	AR2209	.338"	3.540"	82.0	2,941 fps	53,700 PSI	87.0	3,107 fps	62,900 PSI
	AR2213SC	.338"	3.540"	89.0	2,913 fps	54,600 PSI	94.5	3,084 fps	63,100 PSI
	AR2217	.338"	3.540"	96.0	2,952 fps	51,200 PSI	102.0C	3,153 fps	62,900 PSI
215 GR. SIE SPBT	AR2209	.338"	3.590"	83.0	2,940 fps	54,100 PSI	88.0	3,088 fps	62,700 PSI
	AR2213SC	.338"	3.590"	89.0	2,881 fps	51,800 PSI	94.5	3,057 fps	62,800 PSI
	AR2217	.338"	3.590"	96.0	2,947 fps	51,800 PSI	102.0C	3,127 fps	62,800 PSI
225 GR. NOS PART	AR2209	.338"	3.550"	81.0	2,832 fps	54,200 PSI	86.0	2,976 fps	62,600 PSI
	AR2213SC	.338"	3.550"	88.0	2,825 fps	54,400 PSI	93.5	2,977 fps	63,000 PSI
	AR2217	.338"	3.550"	94.0	2,860 fps	51,400 PSI	100.0C	3,058 fps	63,000 PSI
	AR2225	.338"	3.550"	97.0	2,662 fps	52,800 PSI	103.0C	3,055 fps	61,100 PSI
250 GR. HDY SP	AR2209	.338"	3.580"	78.0	2,698 fps	55,700 PSI	83.0	2,820 fps	63,000 PSI
	AR2213SC	.338"	3.580"	84.0	2,662 fps	50,000 PSI	90.0	2,858 fps	62,500 PSI
	AR2217	.338"	3.580"	92.0	2,756 fps	52,400 PSI	98.0C	2,923 fps	62,400 PSI
	AR2225	.338"	3.580"	95.0	2,798 fps	54,600 PSI	101.0C	2,964 fps	64,500 PSI
275 GR. SFT SP	AR2209	.338"	3.490"	73.0	2,507 fps	54,800 PSI	78.0	2,650 fps	62,900 PSI
	AR2213SC	.338"	3.490"	81.0	2,570 fps	55,000 PSI	86.0	2,693 fps	62,500 PSI
	AR2217	.338"	3.490"	86.0	2,602 fps	54,800 PSI	91.0C	2,729 fps	62,700 PSI
	AR2225	.338"	3.490"	88.0	2,649 fps	57,900 PSI	94.0C	2,764 fps	63,100 PSI
300 GR. SIE HPBT	AR2217	.338"	3.580"	82.0	2,443 fps	51,900 PSI	88.5C	2,619 fps	62,500 PSI
	AR2225	.338"	3.580"	84.0	2,501 fps	53,900 PSI	90.5C	2,662 fps	62,200 PSI
338-378 Weatherby Magnum				Case: Weatherby Twist: 1:10" Primer: Federal 215M			Barrel length: 26" Trim length: 2.903"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. BAR XFB	AR2209	.338"	3.650"	99.0	3,387 fps	46,600 CUP	106.0	3,610 fps	53,600 CUP
	AR2213SC	.338"	3.650"	107.0	3,357 fps	47,200 CUP	114.0	3,583 fps	53,500 CUP
	AR2217	.338"	3.650"	116.0	3,374 fps	46,100 CUP	120.0C	3,478 fps	49,200 CUP
175 GR. BAR XFB	AR2209	.338"	3.700"	96.0	3,265 fps	46,500 CUP	102.0	3,478 fps	54,000 CUP
	AR2213SC	.338"	3.700"	103.0	3,200 fps	46,800 CUP	110.0	3,399 fps	53,600 CUP
	AR2217	.338"	3.700"	113.0	3,250 fps	45,600 CUP	120.0C	3,413 fps	51,200 CUP
185 GR. BAR XBTC	AR2209	.338"	3.700"	94.0	3,183 fps	45,600 CUP	100.5	3,368 fps	53,800 CUP
	AR2213SC	.338"	3.700"	102.0	3,212 fps	48,600 CUP	109.0	3,399 fps	54,000 CUP
	AR2217	.338"	3.700"	113.0	3,264 fps	47,700 CUP	120.0C	3,435 fps	53,100 CUP
	AR2225	.338"	3.700"	119.0	3,331 fps	45,900 CUP	123.0C	3,432 fps	48,800 CUP
200 GR. SPR SP	AR2209	.338"	3.740"	92.0	3,046 fps	46,000 CUP	98.5	3,260 fps	54,100 CUP
	AR2213SC	.338"	3.740"	98.0	2,977 fps	43,200 CUP	105.0	3,217 fps	53,700 CUP
	AR2217	.338"	3.740"	110.0	3,138 fps	46,200 CUP	117.0C	3,350 fps	54,000 CUP
	AR2225	.338"	3.740"	116.0	3,227 fps	46,300 CUP	123.0C	3,400 fps	51,400 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

338-378 Weatherby Magnum				Case: Weatherby			Barrel length: 26"		
				Twist: 1:10"			Trim length: 2.903"		
				Primer: Federal 215M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
210 GR. NOS PART	AR2209	.338"	3.740"	91.0	3,011 fps	47,400 CUP	96.5	3,176 fps	54,000 CUP
	AR2213SC	.338"	3.740"	97.0	2,955 fps	46,500 CUP	103.0	3,154 fps	54,000 CUP
	AR2217	.338"	3.740"	106.0	2,981 fps	44,500 CUP	113.0	3,192 fps	53,500 CUP
	AR2225	.338"	3.740"	116.0	3,184 fps	48,000 CUP	123.0C	3,362 fps	54,000 CUP
215 GR. SIE SPBT	AR2209	.338"	3.740"	90.0	3,025 fps	49,700 CUP	96.0	3,143 fps	53,900 CUP
	AR2213SC	.338"	3.740"	98.0	2,979 fps	48,300 CUP	104.0	3,140 fps	53,800 CUP
	AR2217	.338"	3.740"	105.0	2,958 fps	45,700 CUP	112.0	3,155 fps	54,000 CUP
	AR2225	.338"	3.740"	115.0	3,149 fps	46,800 CUP	122.0C	3,331 fps	53,900 CUP
225 GR. NOS PART	AR2209	.338"	3.700"	90.0	2,974 fps	48,000 CUP	95.5	3,100 fps	53,900 CUP
	AR2213SC	.338"	3.700"	98.0	2,948 fps	47,500 CUP	104.0	3,107 fps	54,000 CUP
	AR2217	.338"	3.700"	104.0	2,940 fps	46,000 CUP	111.0	3,112 fps	53,800 CUP
	AR2225	.338"	3.700"	112.0	3,039 fps	45,900 CUP	119.0C	3,244 fps	54,300 CUP
250 GR. HDY SP	AR2213SC	.338"	3.660"	95.0	2,785 fps	46,500 CUP	101.0	2,951 fps	53,800 CUP
	AR2217	.338"	3.660"	102.0	2,795 fps	43,900 CUP	109.0	2,989 fps	53,900 CUP
	AR2225	.338"	3.660"	108.0	2,881 fps	43,800 CUP	115.0C	3,072 fps	52,300 CUP
265 GR. BAR TTSX BT	AR2213SC	.338"	3.900"	94.0	2,802 fps	49,000 CUP	99.0	2,898 fps	52,300 CUP
	AR2217	.338"	3.900"	96.5	2,701 fps	42,200 CUP	105.0	2,932 fps	53,100 CUP
	AR2225	.338"	3.900"	95.4	2,680 fps	41,100 CUP	106.0C	2,970 fps	51,200 CUP
275 GR. SFT SP	AR2213SC	.338"	3.640"	92.0	2,666 fps	48,000 CUP	98.0	2,800 fps	53,900 CUP
	AR2217	.338"	3.640"	100.0	2,688 fps	45,100 CUP	106.0	2,837 fps	53,700 CUP
	AR2225	.338"	3.640"	104.0	2,707 fps	41,600 CUP	110.5C	2,934 fps	52,500 CUP
	AR2218	.338"	3.640"	116.0	2,752 fps	46,000 CUP	120.0C	2,843 fps	51,000 CUP
300 GR. SIE HPBT	AR2213SC	.338"	3.750"	89.0	2,596 fps	48,800 CUP	95.0	2,718 fps	54,000 CUP
	AR2217	.338"	3.750"	92.0	2,506 fps	41,300 CUP	101.5	2,747 fps	54,000 CUP
	AR2225	.338"	3.750"	100.0	2,604 fps	41,900 CUP	106.5	2,818 fps	53,000 CUP
348 Winchester				Case: Winchester			Barrel length: 24"		
				Twist: 1:12"			Trim length: 2.245"		
				Primer: CCI 200					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. HDY JFP	Bench Mark 2	.348"	2.810"	48.0	2,402 fps	30,700 CUP	52.0	2,552 fps	36,200 CUP
	Bench Mark 8208	.348"	2.810"	48.0	2,418 fps	30,900 CUP	53.0	2,579 fps	36,500 CUP
	AR2206H	.348"	2.810"	51.0	2,419 fps	29,700 CUP	55.0	2,591 fps	35,500 CUP
	AR2208	.348"	2.810"	53.0	2,389 fps	29,300 CUP	58.0	2,605 fps	35,800 CUP
	AR2209	.348"	2.810"	61.0	2,382 fps	27,500 CUP	66.0	2,630 fps	35,900 CUP
	AR2213SC	.348"	2.810"	65.0	2,316 fps	26,500 CUP	68.5C	2,467 fps	31,600 CUP
250 GR. BAR FN	Bench Mark 2	.348"	2.760"	44.0	2,087 fps	31,300 CUP	47.5	2,221 fps	35,800 CUP
	AR2206H	.348"	2.760"	45.0	2,074 fps	29,200 CUP	50.0	2,278 fps	36,500 CUP
	AR2208	.348"	2.760"	47.0	2,086 fps	28,800 CUP	52.0	2,283 fps	36,100 CUP
	AR2209	.348"	2.760"	55.0	2,157 fps	31,000 CUP	59.5	2,328 fps	35,700 CUP
	AR2213SC	.348"	2.760"	60.0	2,117 fps	29,800 CUP	65.0C	2,299 fps	35,800 CUP

RIFLE DATA

357 Magnum				Case: Winchester			Barrel length: 18.5"		
				Twist: 1:18.75"			Trim length: 1.285"		
				Primer: Winchester SPM					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
110 GR. HDY XTP	AP70N	.357"	1.590"	7.5	1,585 fps	35,100 CUP	8.0	1,670 fps	40,000 CUP
	AR2205	.357"	1.590"	18.9	2,072 fps	29,600 CUP	21.0	2,233 fps	35,500 CUP
125 GR. HDY XTP	AP70N	.357"	1.590"	7.1	1,423 fps	34,900 CUP	7.6	1,526 fps	39,600 CUP
	AR2205	.357"	1.590"	18.0	1,955 fps	34,400 CUP	20.0	2,122 fps	42,000 CUP
140 GR. HDY XTP	AP70N	.357"	1.590"	6.5	1,282 fps	34,800 CUP	7.0	1,356 fps	40,200 CUP
	AR2205	.357"	1.590"	16.2	1,798 fps	33,100 CUP	18.0	1,930 fps	42,600 CUP
150 GR. NOS JFP	AP70N	.357"	1.590"	6.2	1,096 fps	32,800 CUP	6.7	1,323 fps	39,900 CUP
	AR2205	.357"	1.590"	15.0	1,663 fps	33,100 CUP	16.5	1,775 fps	36,700 CUP
158 GR. LEAD	AP50N	-	-	5.0	1,135 fps	-	5.3	1,200 fps	-
158 GR. HDY XTP	AP70N	.357"	1.580"	5.8	1,059 fps	32,100 CUP	6.3	1,147 fps	39,300 CUP
	AR2205	.357"	1.580"	14.5	1,578 fps	34,600 CUP	16.0	1,668 fps	42,600 CUP
158 GR. LSWC	AP70N	.358"	1.610"	5.5	1,214 fps	23,300 CUP	6.7	1,380 fps	34,600 CUP
	AR2205	.358"	1.610"	10.5	1,288 fps	15,400 CUP	11.5	1,382 fps	17,800 CUP
170 GR. SIE JHC	AR2205	.357"	1.580"	13.0	1,442 fps	32,300 CUP	14.5	1,535 fps	41,200 CUP
180 GR. NOS PART	AR2205	.357"	1.575"	12.7	1,185 fps	36,900 CUP	13.7	1,325 fps	40,900 CUP
35 Remington				Case: Remington			Barrel length: 24"		
				Twist: 1:16"			Trim length: 1.910"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SPR FN	AR2207	.358"	2.470"	28.0	1,971 fps	28,600 CUP	32.0	2,172 fps	33,000 CUP
	AR2219	.358"	2.470"	31.0	1,901 fps	28,200 CUP	35.0	2,104 fps	33,100 CUP
	Bench Mark 2	.358"	2.470"	32.5	1,865 fps	29,300 CUP	35.5	2,034 fps	32,300 CUP
	Bench Mark 8208	.358"	2.470"	33.0	1,915 fps	30,900 CUP	37.0	2,074 fps	33,900 CUP
180 GR.	AR2206	-	-	35.0	1,990 fps	-	38.0	2,150 fps	-
180 GR. SPR FN	AR2206H	.358"	2.470"	35.0	1,991 fps	27,500 CUP	39.0	2,232 fps	33,100 CUP
	AR2208	.358"	2.470"	37.0	1,972 fps	27,200 CUP	40.5	2,196 fps	32,500 CUP
200 GR. HDY RN	AR2207	.358"	2.510"	27.0	1,816 fps	26,700 CUP	30.5	1,999 fps	31,700 CUP
	AR2219	.358"	2.510"	31.0	1,866 fps	28,500 CUP	33.8	1,987 fps	33,100 CUP
	Bench Mark 2	.358"	2.510"	32.5	1,847 fps	29,400 CUP	35.5	1,984 fps	32,600 CUP
	Bench Mark 8208	.358"	2.510"	33.0	1,872 fps	31,000 CUP	36.6	1,997 fps	33,600 CUP
200 GR.	AR2206	-	-	34.0	1,845 fps	-	37.0	2,010 fps	-
200 GR. HDY RN	AR2206H	.358"	2.510"	35.0	1,920 fps	26,100 CUP	38.5	2,110 fps	32,300 CUP
	AR2208	.358"	2.510"	36.0	1,966 fps	28,800 CUP	39.5	2,139 fps	33,300 CUP
200 GR. HDY FTX	Bench Mark 8208	.358"	2.540"	33.2	1,799 fps	28,800 CUP	35.3	1,932 fps	32,000 CUP
	AR2206H	.358"	2.540"	33.8	1,839 fps	30,000 CUP	36.0C	1,959 fps	31,900 CUP
	AR2208	.358"	2.540"	36.0	1,845 fps	29,800 CUP	38.3C	1,963 fps	32,000 CUP
220 GR. SPR FN	AR2207	.358"	2.470"	26.0	1,744 fps	30,400 CUP	29.0	1,867 fps	33,400 CUP
	AR2219	.358"	2.470"	29.0	1,692 fps	26,100 CUP	32.5	1,870 fps	32,600 CUP
	Bench Mark 2	.358"	2.470"	31.0	1,725 fps	30,600 CUP	34.0	1,865 fps	33,300 CUP
	Bench Mark 8208	.358"	2.470"	31.0	1,679 fps	30,500 CUP	34.8	1,932 fps	34,500 CUP
220 GR.	AR2206	-	-	32.0	1,710 fps	-	35.0	1,900 fps	-
220 GR. SPR FN	AR2206H	.358"	2.470"	33.0	1,848 fps	29,000 CUP	36.3	2,010 fps	33,600 CUP
	AR2208	.358"	2.470"	34.0	1,803 fps	27,800 CUP	38.0	1,998 fps	33,300 CUP

RIFLE DATA

356 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 20" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SPR FP	AR2205	.358"	2.565"	24.0	1,878 fps	-	30.0	2,238 fps	-
	AR2207	.358"	2.565"	40.0	2,441 fps	-	43.0	2,600 fps	-
	AR2219	.358"	2.565"	44.0	2,360 fps	-	47.0	2,552 fps	-
	AR2206H	.358"	2.565"	46.0	2,360 fps	-	49.0	2,535 fps	-
200 GR. SIE RN	AR2207	.358"	2.550"	37.0	2,201 fps	-	40.0	2,383 fps	-
	AR2219	.358"	2.550"	41.0	2,199 fps	-	44.0	2,340 fps	-
	AR2206H	.358"	2.550"	43.0	2,170 fps	-	46.0	2,338 fps	-
250 GR. HDY RN	AR2207	.358"	2.775"	34.0	1,879 fps	-	37.0	2,133 fps	-
	AR2219	.358"	2.775"	38.0	1,866 fps	-	41.0	2,106 fps	-
	AR2206H	.358"	2.775"	40.0	1,919 fps	-	43.0	2,128 fps	-
358 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 26" Trim length: 2.005"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. BAR X	AR2219	.358"	2.700"	40.0	2,380 fps	46,900 CUP	44.0	2,522 fps	49,700 CUP
	Bench Mark 2	.358"	2.700"	43.0	2,419 fps	44,900 CUP	47.0	2,574 fps	50,300 CUP
	AR2206H	.358"	2.700"	44.0	2,408 fps	41,500 CUP	48.0C	2,603 fps	49,900 CUP
	AR2208	.358"	2.700"	47.0	2,442 fps	42,500 CUP	51.0C	2,594 fps	48,200 CUP
200 GR. HDY SP	AR2219	.358"	2.650"	40.0	2,306 fps	45,400 CUP	44.8	2,491 fps	49,400 CUP
	Bench Mark 2	.358"	2.650"	42.0	2,319 fps	42,700 CUP	46.2	2,494 fps	50,000 CUP
	AR2206H	.358"	2.650"	44.0	2,316 fps	40,200 CUP	48.0C	2,519 fps	49,800 CUP
	AR2208	.358"	2.650"	47.0	2,376 fps	41,100 CUP	51.0C	2,527 fps	47,900 CUP
220 GR. SPR FN SP	AR2219	.358"	2.560"	40.0	2,243 fps	45,700 CUP	44.0	2,371 fps	49,300 CUP
	Bench Mark 2	.358"	2.560"	41.0	2,184 fps	39,400 CUP	45.0	2,361 fps	49,500 CUP
	AR2206H	.358"	2.560"	43.0	2,227 fps	41,500 CUP	47.5C	2,421 fps	50,200 CUP
	AR2208	.358"	2.560"	46.0	2,226 fps	42,800 CUP	50.0C	2,445 fps	50,300 CUP
225 GR. SIE BTSP	AR2219	.358"	2.770"	41.0	2,275 fps	46,000 CUP	43.0	2,372 fps	50,300 CUP
	Bench Mark 2	.358"	2.770"	40.0	2,211 fps	44,200 CUP	44.0	2,354 fps	50,600 CUP
	AR2206H	.358"	2.770"	42.0	2,223 fps	41,700 CUP	46.5	2,422 fps	50,300 CUP
	AR2208	.358"	2.770"	45.0	2,254 fps	40,700 CUP	49.0	2,451 fps	50,600 CUP
250 GR. NOS PART	AR2219	.358"	2.760"	38.0	2,095 fps	43,500 CUP	42.5	2,260 fps	49,900 CUP
	Bench Mark 2	.358"	2.760"	38.0	2,030 fps	39,800 CUP	42.0	2,176 fps	49,400 CUP
	AR2206H	.358"	2.760"	40.0	2,057 fps	40,400 CUP	44.5C	2,257 fps	50,500 CUP
	AR2208	.358"	2.760"	43.0	2,119 fps	39,500 CUP	47.0C	2,278 fps	48,600 CUP

RIFLE DATA

35 Whelen				Case: Remington Twist: 1:16" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.484"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SPR FP	AR2219	.358"	3.045"	55.0	2,707 fps	44,000 CUP	58.0	2,829 fps	48,500 CUP
	Bench Mark 8208	.358"	3.040"	56.0	2,736 fps	42,600 CUP	60.0C	2,891 fps	47,500 CUP
180 GR.	AR2206	-	-	55.5	2,640 fps	-	58.5	2,785 fps	-
180 GR. SPR FP	AR2206H	.358"	3.045"	56.0	2,649 fps	40,000 CUP	60.0	2,798 fps	46,800 CUP
	AR2208	.358"	3.045"	54.0	2,609 fps	39,900 CUP	60.0C	2,764 fps	42,500 CUP
200 GR. SIE RN	AR2219	.358"	3.050"	52.0	2,540 fps	42,600 CUP	56.0	2,691 fps	48,500 CUP
	Bench Mark 8208	.358"	3.050"	53.0	2,579 fps	41,300 CUP	59.0C	2,802 fps	48,900 CUP
200 GR.	AR2206	-	-	52.5	2,545 fps	-	56.5	2,725 fps	-
200 GR. SIE RN	AR2206H	.358"	3.050"	54.0	2,544 fps	43,500 CUP	57.0	2,689 fps	49,000 CUP
	AR2208	.358"	3.050"	52.0	2,508 fps	40,400 CUP	57.0	2,653 fps	42,300 CUP
220 GR. SPR FP	AR2219	.358"	3.045"	50.0	2,392 fps	43,500 CUP	54.0	2,566 fps	49,500 CUP
	Bench Mark 8208	.358"	3.045"	49.5	2,397 fps	42,600 CUP	55.0	2,623 fps	50,200 CUP
220 GR.	AR2206	-	-	50.5	2,400 fps	-	54.5	2,580 fps	-
220 GR. SPR FP	AR2206H	.358"	3.045"	51.0	2,461 fps	44,000 CUP	55.0	2,588 fps	50,000 CUP
225 GR. SIE SBT	Bench Mark 8208	.358"	3.175"	49.5	2,409 fps	40,500 CUP	55.0C	2,618 fps	49,600 CUP
	AR2206H	.358"	3.175"	49.5	2,404 fps	40,900 CUP	55.0C	2,611 fps	49,200 CUP
	AR2208	.358"	3.175"	51.0	2,442 fps	43,500 CUP	56.0	2,588 fps	46,400 CUP
250 GR. HDY SP	AR2219	.358"	3.220"	48.0	2,249 fps	44,000 CUP	52.0	2,398 fps	48,500 CUP
	Bench Mark 8208	.358"	3.290"	49.0	2,311 fps	44,000 CUP	54.3C	2,515 fps	50,300 CUP
250 GR.	AR2206	-	-	48.0	2,260 fps	-	52.0	2,450 fps	-
250 GR. HDY SP	AR2206H	.358"	3.220"	49.0	2,330 fps	43,700 CUP	53.0	2,455 fps	50,000 CUP
	AR2208	.358"	3.220"	50.0	2,348 fps	44,900 CUP	55.0	2,486 fps	49,900 CUP

350 Remington Magnum				Case: Remington Twist: 1:16" Primer: Remington 9 1/2			Barrel length: 26" Trim length: 2.160"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SPR FP	AR2207	.358"	2.740"	48.0	2,622 fps	35,400 CUP	51.0	2,808 fps	48,000 CUP
	AR2219	.358"	2.740"	53.0	2,688 fps	43,000 CUP	58.0	2,894 fps	50,300 CUP
180 GR.	AR2206	-	-	54.0	2,640 fps	-	59.0	2,960 fps	-
180 GR. SPR FP	AR2206H	.358"	2.740"	56.0	2,696 fps	39,000 CUP	61.0	3,015 fps	52,300 CUP
200 GR. HDY SP	AR2207	.358"	2.740"	45.0	2,382 fps	34,200 CUP	48.0	2,512 fps	44,100 CUP
	AR2219	.358"	2.740"	50.0	2,427 fps	39,700 CUP	55.0	2,684 fps	49,300 CUP
200 GR.	AR2206	-	-	52.0	2,565 fps	-	56.0	2,795 fps	-
200 GR. HDY SP	AR2206H	.358"	2.740"	54.5	2,625 fps	37,800 CUP	59.0	2,822 fps	52,100 CUP
220 GR. SPR FP	AR2207	.358"	2.740"	43.0	2,304 fps	36,600 CUP	46.0	2,423 fps	48,500 CUP
	AR2219	.358"	2.740"	48.0	2,293 fps	39,200 CUP	52.0	2,473 fps	49,300 CUP
220 GR.	AR2206	-	-	50.0	2,417 fps	-	54.0	2,610 fps	-
220 GR. SPR FP	AR2206H	.358"	2.740"	51.5	2,534 fps	37,200 CUP	56.0	2,651 fps	51,200 CUP
250 GR. HDY SP	AR2207	.358"	2.930"	39.0	2,069 fps	34,800 CUP	42.0	2,190 fps	45,900 CUP
	AR2219	.358"	2.930"	45.0	2,092 fps	42,000 CUP	49.0	2,333 fps	51,600 CUP
250 GR.	AR2206	-	-	49.0	2,220 fps	-	52.5	2,450 fps	-
250 GR. HDY SP	AR2206H	.358"	2.930"	49.5	2,225 fps	37,800 CUP	54.0	2,497 fps	53,200 CUP

RIFLE DATA

358 Norma Magnum				Case: Norma Twist: 1:16" Primer: Federal 215			Barrel length: 24" Trim length: 2.498"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
180 GR. SPR FP	AR2209	.358"	3.340"	75.0	2,894 fps	-	79.0	3,017 fps	-
200 GR. HDY SP	AR2209	.358"	3.140"	74.0	2,852 fps	-	78.0	2,984 fps	-
250 GR. NOS PART	AR2206H	.358"	3.300"	61.0	2,544 fps	-	65.0	2,736 fps	-
	AR2209	.358"	3.300"	71.0	2,634 fps	-	75.0	2,778 fps	-
358 Shooting Times Alaskan				Case: Remington Twist: 1:12" Primer: Federal 215			Barrel length: 24" Trim length: 2.845"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
225 GR. NOS PART	AR2209	.358"	3.670"	82.0	2,951 fps	-	87.0	3,119 fps	-
250 GR. NOS PART	AR2209	.358"	3.670"	79.0	2,688 fps	-	84.0	2,933 fps	-
	AR2213SC	.358"	3.670"	85.0	2,720 fps	-	90.0	2,984 fps	-
	AR2217	.358"	3.670"	85.0	2,740 fps	-	90.0	2,810 fps	-
9 x 57mm Mauser				Case: Twist: - Primer:			Barrel length: 24" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
250 GR.	AR2206	-	-	-	-	-	45.0	2,250 fps	-
	AR2208	-	-	-	-	-	49.0	2,250 fps	-
280 GR.	AR2206	-	-	-	-	-	41.5	2,100 fps	-
	AR2208	-	-	-	-	-	45.0	2,100 fps	-
9.3 x 62mm Mauser				Case: Norma Twist: 1:10" Primer: CCI 200			Barrel length: 24" Trim length: 2.431"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
250 GR. BAR TSX	AR2206H	.366"	3.200"	51.0	2,221 fps	37,000 CUP	57.0C	2,484 fps	48,700 CUP
	AR2208	.366"	3.200"	52.0	2,199 fps	33,900 CUP	58.0C	2,436 fps	47,200 CUP
270 GR. SPR SP	AR2206H	.366"	3.280"	52.0	2,244 fps	39,800 CUP	56.5	2,406 fps	48,000 CUP
	AR2208	.366"	3.280"	55.0	2,290 fps	40,100 CUP	59.5	2,440 fps	48,100 CUP
	AR2209	.366"	3.280"	63.0	2,322 fps	38,500 CUP	67.0C	2,438 fps	44,600 CUP
286 GR. NOS PART	AR2206H	.366"	3.225"	51.0	2,131 fps	39,000 CUP	55.5	2,331 fps	47,800 CUP
	AR2208	.366"	3.225"	55.0	2,242 fps	39,800 CUP	59.0C	2,350 fps	47,500 CUP
	AR2209	.366"	3.225"	64.0	2,321 fps	40,800 CUP	67.0C	2,407 fps	46,300 CUP
300 GR. SFT SP	AR2206H	.366"	3.150"	47.0	1,979 fps	40,200 CUP	52.0	2,133 fps	48,200 CUP
	AR2208	.366"	3.150"	52.0	2,083 fps	42,000 CUP	56.0	2,194 fps	47,800 CUP
	AR2209	.366"	3.150"	60.0	2,142 fps	40,000 CUP	64.0C	2,288 fps	48,100 CUP

RIFLE DATA

9.3 x 64mm Brennecke				Case: Twist: - Primer:			Barrel length: 26" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
231-234 GR.	AR2208	-	-	-	-	-	68.0	2,700 fps	-
	AR2209	-	-	-	-	-	73.0	2,700 fps	-
258 GR.	AR2208	-	-	-	-	-	66.5	2,500 fps	-
	AR2209	-	-	-	-	-	70.5	2,500 fps	-
285-286 GR.	AR2208	-	-	-	-	-	63.0	2,300 fps	-
	AR2209	-	-	-	-	-	67.5	2,300 fps	-
293 GR.	AR2208	-	-	-	-	-	62.0	2,250 fps	-
	AR2209	-	-	-	-	-	67.0	2,250 fps	-
9.3 x 74Rmm				Case: Norma Twist: 1:14" Primer: CCI 200			Barrel length: 24" Trim length: 2.931"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
250 GR. BAR TSX FB	AR2206H	.366"	3.700"	44.0	2,033 fps	39,000 CUP	48.0	2,155 fps	42,300 CUP
	AR2208	.366"	3.700"	48.0	2,096 fps	39,000 CUP	52.0	2,211 fps	42,400 CUP
	AR2209	.366"	3.700"	59.0	2,150 fps	37,100 CUP	64.5C	2,330 fps	41,800 CUP
270 GR. SPR SP	AR2208	.366"	3.665"	50.0	2,107 fps	36,500 CUP	54.5	2,257 fps	42,000 CUP
	AR2209	.366"	3.665"	64.0	2,292 fps	36,200 CUP	68.0C	2,403 fps	41,600 CUP
286 GR. NOS PART	AR2208	.366"	3.700"	51.0	2,125 fps	38,200 CUP	54.0	2,200 fps	41,800 CUP
	AR2209	.366"	3.700"	61.5	2,211 fps	36,800 CUP	65.5C	2,323 fps	41,500 CUP
	AR2213SC	.366"	3.700"	66.0	2,119 fps	33,400 CUP	70.0C	2,232 fps	36,800 CUP
300 GR. SFT SP	AR2209	.366"	3.640"	58.0	2,111 fps	38,900 CUP	62.0C	2,210 fps	42,100 CUP
	AR2213SC	.366"	3.640"	61.0	1,939 fps	31,900 CUP	67.0C	2,128 fps	40,400 CUP
38-55 Winchester				Case: Winchester Twist: 1:18" Primer: CCI 200			Barrel length: 24" Trim length: 2.075"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
255 GR. BAR JFP	AR2207	.375"	2.620"	24.0	1,554 fps	21,400 CUP	28.0	1,788 fps	26,700 CUP
	AR2219	.375"	2.620"	27.0	1,603 fps	25,500 CUP	33.0	1,830 fps	28,200 CUP
375 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 2.010"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. SIE JFP	AR2207	.375"	2.530"	35.0	2,288 fps	36,900 CUP	38.0C	2,480 fps	50,600 CUP
	AR2219	.375"	2.530"	39.0	2,223 fps	35,300 CUP	42.0C	2,419 fps	46,900 CUP
220 GR. HDY JFP	AR2207	.375"	2.500"	31.0	2,067 fps	33,700 CUP	34.0	2,233 fps	49,300 CUP
	AR2219	.375"	2.500"	35.0	2,029 fps	35,700 CUP	38.5C	2,236 fps	48,900 CUP

RIFLE DATA

376 Steyr				Case: Hornady Twist: 1:12" Primer: Federal 215M			Barrel length: 24" Trim length: 2.350"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
210 GR. BAR XFB	AR2219	.375"	3.100"	63.0	2,864 fps	50,900 PSI	67.5	3,011 fps	59,800 PSI
	Bench Mark 2	.375"	3.100"	63.0	2,774 fps	45,000 PSI	68.0	2,943 fps	54,000 PSI
	AR2206H	.375"	3.100"	64.0	2,765 fps	45,200 PSI	68.0C	2,891 fps	50,600 PSI
	AR2208	.375"	3.100"	65.0	2,668 fps	40,800 PSI	68.0C	2,764 fps	44,800 PSI
225 GR. HDY SP	AR2219	.375"	3.070"	58.0	2,704 fps	53,100 PSI	63.0	2,839 fps	59,900 PSI
	Bench Mark 2	.375"	3.070"	62.0	2,730 fps	50,600 PSI	67.0C	2,890 fps	59,700 PSI
	AR2206H	.375"	3.070"	64.0	2,767 fps	51,000 PSI	68.0C	2,892 fps	58,200 PSI
	AR2208	.375"	3.070"	64.0	2,628 fps	45,600 PSI	68.0C	2,767 fps	52,400 PSI
235 GR. SPR SP	AR2219	.375"	3.060"	59.0	2,709 fps	58,000 PSI	63.0	2,795 fps	59,900 PSI
	Bench Mark 2	.375"	3.060"	62.0	2,689 fps	50,900 PSI	66.5	2,835 fps	59,900 PSI
	AR2206H	.375"	3.060"	64.0	2,708 fps	50,100 PSI	68.0C	2,846 fps	59,000 PSI
	AR2208	.375"	3.060"	64.0	2,618 fps	47,200 PSI	68.0C	2,735 fps	52,300 PSI
250 GR. SIE SP	AR2219	.375"	3.110"	56.0	2,570 fps	55,700 PSI	60.5	2,683 fps	60,100 PSI
	Bench Mark 2	.375"	3.110"	59.0	2,573 fps	51,200 PSI	63.5	2,714 fps	60,100 PSI
	AR2206H	.375"	3.110"	60.0	2,582 fps	48,600 PSI	65.0	2,732 fps	59,800 PSI
	AR2208	.375"	3.110"	64.0	2,589 fps	51,200 PSI	68.0C	2,713 fps	58,000 PSI
260 GR. NOS PART	AR2219	.375"	3.100"	52.0	2,405 fps	54,900 PSI	56.0	2,511 fps	60,200 PSI
	Bench Mark 2	.375"	3.100"	57.0	2,453 fps	51,400 PSI	60.5	2,584 fps	59,700 PSI
	AR2206H	.375"	3.100"	59.0	2,500 fps	53,800 PSI	62.5	2,613 fps	59,400 PSI
	AR2208	.375"	3.100"	62.0	2,466 fps	49,100 PSI	67.5C	2,651 fps	60,000 PSI
270 GR. HDY SP	AR2219	.375"	3.060"	53.0	2,382 fps	50,800 PSI	57.0	2,517 fps	59,600 PSI
	Bench Mark 2	.375"	3.060"	55.0	2,400 fps	50,500 PSI	59.0	2,549 fps	59,500 PSI
	AR2206H	.375"	3.060"	58.0	2,459 fps	52,700 PSI	62.0C	2,580 fps	59,400 PSI
	AR2208	.375"	3.060"	61.0	2,446 fps	50,000 PSI	65.5C	2,610 fps	60,100 PSI
300 GR. SFT SP	AR2219	.375"	3.080"	52.0	2,236 fps	53,600 PSI	55.0	2,322 fps	60,000 PSI
	Bench Mark 2	.375"	3.080"	52.0	2,176 fps	49,000 PSI	56.5	2,343 fps	59,900 PSI
	AR2206H	.375"	3.080"	55.0	2,248 fps	51,900 PSI	59.5	2,388 fps	60,200 PSI
	AR2208	.375"	3.080"	58.0	2,255 fps	50,000 PSI	62.5C	2,410 fps	59,700 PSI
375 H & H Magnum				Case: Winchester Twist: 1:12" Primer: Federal 215M			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. SIE JFP	Bench Mark 8208	.375"	3.350"	69.0	2,910 fps	47,700 CUP	75.5	3,079 fps	50,200 CUP
	AR2206H	.375"	3.350"	67.0	2,828 fps	42,300 CUP	78.5	3,116 fps	48,700 CUP
	AR2208	.375"	3.350"	65.0	2,839 fps	41,900 CUP	76.0	3,121 fps	50,300 CUP
235 GR. SPR SP	Trail Boss	.375"	3.600"	19.0	1,091 fps	-	26.3	1,144 fps	-
	Bench Mark 8208	.375"	3.600"	61.0	2,632 fps	45,400 CUP	67.0	2,793 fps	50,900 CUP
	AR2206H	.375"	3.600"	69.0	2,743 fps	44,300 CUP	74.0	2,895 fps	50,400 CUP
	AR2208	.375"	3.600"	65.0	2,684 fps	46,700 CUP	70.0	2,819 fps	51,200 CUP
250 GR. SFT SP	Bench Mark 8208	.375"	3.555"	58.0	2,500 fps	45,600 CUP	62.2	2,609 fps	49,900 CUP
	AR2206H	.375"	3.555"	64.0	2,574 fps	44,800 CUP	69.0	2,696 fps	49,700 CUP
	AR2208	.375"	3.555"	62.0	2,531 fps	43,900 CUP	66.5	2,642 fps	49,700 CUP
	AR2209	.375"	3.555"	78.0	2,620 fps	41,500 CUP	83.0C	2,733 fps	44,900 CUP
260 GR. NOS PART	AR2209	.375"	3.580"	70.0	2,551 fps	47,300 CUP	78.0	2,702 fps	51,700 CUP

C = Compressed Load; L = Lead Projectile

RIFLE DATA

375 H & H Magnum				Case: Winchester			Barrel length: 24"		
				Twist: 1:12"			Trim length: 2.840"		
				Primer: Federal 215M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2213SC	.375"	3.580"	76.0	2,470 fps	43,700 CUP	83.0C	2,622 fps	47,800 CUP
270 GR. BAR TSX	AR2208	.375"	3.550"	58.0	2,369 fps	46,400 CUP	65.0	2,521 fps	50,000 CUP
	AR2209	.375"	3.550"	69.0	2,263 fps	38,300 CUP	75.0C	2,465 fps	42,800 CUP
300 GR. SIE SPBT	AR2206H	.375"	3.600"	61.0	2,411 fps	46,800 CUP	65.0	2,505 fps	50,400 CUP
	AR2208	.375"	3.600"	58.0	2,345 fps	45,200 CUP	62.0	2,454 fps	49,300 CUP
	AR2209	.375"	3.600"	77.0	2,539 fps	45,400 CUP	81.5C	2,645 fps	49,500 CUP
375 Ruger				Case: Hornady			Barrel length: 24"		
				Twist: 1:12"			Trim length: 2.580"		
				Primer: Winchester LRM					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
235 GR. BAR TSX	AR2206H	.375"	3.280"	66.7	2,768 fps	52,800 PSI	71.0	2,882 fps	58,500 PSI
	AR2208	.375"	3.280"	69.1	2,709 fps	48,600 PSI	73.5	2,885 fps	59,600 PSI
250 GR. SFT SP	AR2208	.375"	3.270"	67.7	2,657 fps	53,200 PSI	72.0	2,773 fps	59,000 PSI
	AR2209	.375"	3.270"	77.5	2,675 fps	51,400 PSI	82.5	2,834 fps	59,000 PSI
260 GR. NOS AB	AR2208	.375"	3.320"	67.3	2,618 fps	52,200 PSI	71.6	2,749 fps	59,200 PSI
	AR2209	.375"	3.320"	78.0	2,681 fps	50,800 PSI	83.5C	2,837 fps	60,100 PSI
270 GR. HDY SP	AR2209	.375"	3.310"	78.5	2,614 fps	47,800 PSI	83.5C	2,783 fps	58,400 PSI
300 GR. HDY RN	AR2209	.375"	3.280"	75.9	2,510 fps	48,300 PSI	80.7	2,660 fps	59,600 PSI
	AR2213SC	.375"	3.280"	82.7	2,457 fps	48,100 PSI	88.0C	2,611 fps	57,800 PSI
350 GR. BAR TSX FB	AR2209	.375"	3.295"	62.1	2,142 fps	50,900 PSI	66.9C	2,281 fps	59,200 PSI
375 Weatherby Magnum				Case: Weatherby			Barrel length: 24"		
				Twist: 1:12"			Trim length: 2.850"		
				Primer: Federal 215M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
210 GR. BAR XFB	AR2206H	.375"	3.585"	69.0	2,824 fps	48,500 CUP	74.0	2,945 fps	53,500 CUP
	AR2208	.375"	3.585"	70.0	2,782 fps	48,700 CUP	75.0	2,900 fps	53,100 CUP
	AR2209	.375"	3.585"	91.0	3,018 fps	49,600 CUP	95.5C	3,110 fps	52,900 CUP
	AR2213SC	.375"	3.585"	95.0	2,862 fps	43,000 CUP	98.0C	2,938 fps	46,100 CUP
225 GR. HDY SP	AR2206H	.375"	3.585"	69.0	2,789 fps	50,300 CUP	73.5	2,896 fps	53,100 CUP
	AR2208	.375"	3.585"	70.0	2,713 fps	47,600 CUP	74.5	2,850 fps	53,500 CUP
	AR2209	.375"	3.585"	89.0	2,939 fps	48,300 CUP	94.5	3,070 fps	53,400 CUP
	AR2213SC	.375"	3.585"	96.0	2,870 fps	46,000 CUP	99.0C	2,957 fps	49,600 CUP
235 GR. SPR SP	AR2206H	.375"	3.585"	69.0	2,742 fps	50,700 CUP	73.3	2,834 fps	53,100 CUP
	AR2208	.375"	3.585"	69.0	2,669 fps	47,200 CUP	73.5	2,774 fps	52,700 CUP
	AR2209	.375"	3.585"	85.0	2,811 fps	46,400 CUP	90.5	2,952 fps	52,600 CUP
	AR2213SC	.375"	3.585"	94.0	2,813 fps	45,900 CUP	99.0C	2,912 fps	50,500 CUP
250 GR. SIE SPBT	AR2209	.375"	3.600"	83.0	2,765 fps	47,600 CUP	88.0	2,873 fps	52,300 CUP
	AR2213SC	.375"	3.600"	91.0	2,741 fps	46,900 CUP	97.0C	2,871 fps	52,500 CUP
260 GR. NOS PART	AR2209	.375"	3.585"	83.0	2,724 fps	50,800 CUP	88.0	2,818 fps	53,300 CUP
	AR2213SC	.375"	3.585"	90.0	2,692 fps	48,300 CUP	96.0C	2,810 fps	53,200 CUP
270 GR. HDY SP	AR2209	.375"	3.600"	83.0	2,708 fps	49,000 CUP	88.0	2,787 fps	52,800 CUP
	AR2213SC	.375"	3.600"	90.0	2,631 fps	46,900 CUP	96.0C	2,787 fps	53,600 CUP

RIFLE DATA

375 Weatherby Magnum				Case: Weatherby Twist: 1:12" Primer: Federal 215M			Barrel length: 24" Trim length: 2.850"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
285 GR. SPR GSSP	AR2209	.375"	3.580"	81.0	2,617 fps	49,800 CUP	86.5C	2,734 fps	53,400 CUP
	AR2213SC	.375"	3.580"	89.0	2,605 fps	48,600 CUP	94.5C	2,725 fps	53,600 CUP
300 GR. SFT SP	AR2209	.375"	3.560"	80.0	2,544 fps	49,100 CUP	85.0	2,642 fps	53,500 CUP
	AR2213SC	.375"	3.560"	87.0	2,498 fps	47,500 CUP	93.0C	2,649 fps	54,200 CUP
375 Remington Ultra Mag				Case: Remington Twist: 1:12" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
210 GR. BAR XFB	AR2208	.375"	3.600"	85.0	3,110 fps	54,700 PSI	91.0	3,271 fps	63,100 PSI
	AR2209	.375"	3.600"	96.0	3,078 fps	52,100 PSI	102.5	3,293 fps	63,300 PSI
225 GR. HDY SP	AR2209	.375"	3.560"	95.0	3,027 fps	52,200 PSI	101.0	3,214 fps	62,800 PSI
	AR2213SC	.375"	3.560"	105.0	3,062 fps	56,200 PSI	108.0C	3,137 fps	60,600 PSI
235 GR. SPR SP	AR2209	.375"	3.550"	94.0	3,000 fps	54,600 PSI	100.0	3,163 fps	63,500 PSI
	AR2213SC	.375"	3.550"	102.0	2,957 fps	53,800 PSI	108.0C	3,111 fps	62,800 PSI
250 GR. BAR XFB	AR2209	.375"	3.600"	89.0	2,842 fps	52,800 PSI	94.5	3,010 fps	62,700 PSI
	AR2213SC	.375"	3.600"	98.0	2,850 fps	55,100 PSI	103.0	3,090 fps	62,700 PSI
260 GR. NOS PART	AR2209	.375"	3.570"	88.0	2,819 fps	56,300 PSI	92.5	2,935 fps	62,900 PSI
	AR2213SC	.375"	3.570"	95.0	2,767 fps	54,100 PSI	101.0	2,923 fps	62,900 PSI
270 GR. HDY SP	AR2209	.375"	3.550"	90.0	2,767 fps	52,400 PSI	95.0	2,932 fps	62,600 PSI
	AR2213SC	.375"	3.550"	99.0	2,779 fps	54,200 PSI	104.0C	2,922 fps	62,900 PSI
285 GR. SPR GSSP	AR2209	.375"	3.570"	88.0	2,724 fps	57,500 PSI	92.5	2,836 fps	62,600 PSI
	AR2213SC	.375"	3.570"	96.0	2,706 fps	55,500 PSI	101.0	2,830 fps	62,900 PSI
300 GR. SFT SP	AR2209	.375"	3.550"	85.0	2,598 fps	54,400 PSI	90.0	2,733 fps	62,700 PSI
	AR2213SC	.375"	3.550"	92.0	2,593 fps	54,600 PSI	97.0	2,719 fps	62,500 PSI
	AR2217	.375"	3.550"	103.0	2,628 fps	54,000 PSI	105.0C	2,678 fps	57,600 PSI
378 Weatherby Magnum				Case: Weatherby Twist: 1:12" Primer: Federal 215M			Barrel length: 24" Trim length: 2.850"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
235 GR. SPR SP	AR2209	.375"	3.645"	102.0	3,003 fps	-	109.0	3,224 fps	-
	AR2213SC	.375"	3.645"	107.0	2,972 fps	-	117.0	3,202 fps	-
270 GR. HDY SP	AR2209	.375"	3.645"	99.0	2,779 fps	-	105.0	3,091 fps	-
	AR2213SC	.375"	3.645"	105.0	2,724 fps	-	115.0	3,102 fps	-
300 GR. NOS PART	AR2209	.375"	3.680"	95.0	2,595 fps	-	100.0	2,940 fps	-
	AR2213SC	.375"	3.680"	102.0	2,624 fps	-	112.0	2,926 fps	-

RIFLE DATA

38-40 Winchester (38-40 WCF)				Case: Twist: - Primer:			Barrel length: 26" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
130 GR.	AR2205	-	-	-	-	-	28.0	2,000 fps	-
180 GR.	AR2205	-	-	-	-	-	24.5	1,750 fps	-
404 Jeffery				Case: Twist: - Primer:			Barrel length: 26" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
400 GR.	AR2206	-	-	-	-	-	63.0	2,100 fps	-
	AR2208	-	-	-	-	-	71.0	2,100 fps	-
	AR2209	-	-	-	-	-	80.0	2,100 fps	-
405 Winchester				Case: Hornady Twist: 1:14" Primer: Winchester LR			Barrel length: 24" Trim length: 2.573"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. BAR TSX FB	Bench Mark 2	.411"	3.200"	45.0	1,879 fps	34,400 PSI	50.0	2,077 fps	43,000 PSI
	Bench Mark 8208	.411"	3.200"	46.0	1,915 fps	36,700 PSI	51.2	2,101 fps	43,500 PSI
	AR2206H	.411"	3.200"	48.0	1,945 fps	35,500 PSI	53.5C	2,157 fps	44,500 PSI
	AR2208	.411"	3.200"	50.0	1,899 fps	35,200 PSI	55.0C	2,083 fps	42,500 PSI
300 GR. HDY FP	AR2207	.411"	3.085"	37.5	1,925 fps	32,300 PSI	41.5	2,091 fps	43,000 PSI
	AR2219	.411"	3.085"	44.0	1,996 fps	34,800 PSI	49.0	2,150 fps	41,200 PSI
	Bench Mark 2	.411"	3.085"	53.0	2,206 fps	34,100 PSI	59.0	2,404 fps	42,200 PSI
	Bench Mark 8208	.411"	3.085"	50.0	2,086 fps	36,500 PSI	56.0	2,260 fps	42,900 PSI
	AR2206H	.411"	3.085"	53.0	2,114 fps	33,200 PSI	59.0	2,300 fps	40,000 PSI
	AR2208	.411"	3.085"	55.0	2,079 fps	32,600 PSI	61.0	2,275 fps	41,200 PSI
400 GR. WDLGH RNSN	AR2207	.411"	3.230"	33.0	1,582 fps	33,600 PSI	36.5	1,718 fps	43,400 PSI
	Bench Mark 8208	.411"	3.230"	39.0	1,652 fps	36,700 PSI	43.0	1,784 fps	42,900 PSI
	AR2206H	.411"	3.230"	45.5	1,801 fps	37,100 PSI	50.5	1,945 fps	44,900 PSI
	AR2208	.411"	3.230"	48.0	1,790 fps	37,000 PSI	52.0	1,928 fps	44,300 PSI
416 Remington Magnum				Case: Remington Twist: 1:14" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. BAR TSX	Bench Mark 8208	.416"	3.600"	74.0	2,600 fps	44,200 CUP	78.5	2,725 fps	52,700 CUP
	AR2206H	.416"	3.600"	75.0	2,631 fps	43,700 CUP	80.5	2,779 fps	50,300 CUP
	AR2208	.416"	3.600"	79.0	2,610 fps	42,900 CUP	84.0C	2,745 fps	48,600 CUP
350 GR. SPR SP	Trail Boss	.416"	3.590"	20.0	913 fps	19,700 CUP	29.0	1,143 fps	29,900 CUP
	Bench Mark 8208	.416"	3.590"	71.0	2,409 fps	44,600 CUP	77.0	2,551 fps	52,700 CUP
	AR2206H	.416"	3.590"	75.0	2,476 fps	45,000 CUP	80.0	2,601 fps	52,200 CUP
	AR2208	.416"	3.590"	77.0	2,519 fps	46,900 CUP	82.0	2,622 fps	52,400 CUP
400 GR. HDY JRN	Bench Mark 8208	.416"	3.560"	68.0	2,233 fps	46,100 CUP	73.0	2,348 fps	52,800 CUP
	AR2206H	.416"	3.560"	71.0	2,268 fps	46,100 CUP	76.0	2,391 fps	53,300 CUP

RIFLE DATA

416 Remington Magnum				Case: Remington Twist: 1:14" Primer: Remington 9 1/2M			Barrel length: 24" Trim length: 2.840"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2208	.416"	3.560"	72.0	2,276 fps	46,300 CUP	77.0	2,407 fps	53,000 CUP
	AR2209	.416"	3.560"	85.0	2,305 fps	41,400 CUP	88.0C	2,395 fps	46,400 CUP
416 Rigby				Case: Norma Twist: 1:16.5" Primer: Federal 215M			Barrel length: 24" Trim length: 2.890"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. BAR TSX	AR2209	.416"	3.630"	92.0	2,577 fps	35,700 CUP	99.0	2,776 fps	42,900 CUP
	AR2213SC	.416"	3.630"	102.0	2,555 fps	34,900 CUP	109.5	2,725 fps	40,600 CUP
325 GR. BAR XFB	AR2209	.416"	3.660"	94.0	2,549 fps	37,600 CUP	99.0	2,660 fps	43,600 CUP
	AR2213SC	.416"	3.660"	102.0	2,522 fps	37,700 CUP	107.0	2,631 fps	43,700 CUP
350 GR. SPR SP	Trail Boss	.416"	3.640"	25.0	1,139 fps	-	35.0	1,354 fps	-
	AR2209	.416"	3.640"	94.0	2,507 fps	38,000 CUP	99.0	2,641 fps	43,400 CUP
	AR2213SC	.416"	3.640"	101.0	2,459 fps	37,100 CUP	107.0	2,609 fps	43,000 CUP
	AR2217	.416"	3.640"	112.0	2,479 fps	37,400 CUP	116.0C	2,551 fps	39,900 CUP
400 GR. HDY SP	AR2209	.416"	3.700"	89.0	2,333 fps	38,500 CUP	94.0	2,456 fps	43,500 CUP
	AR2213SC	.416"	3.700"	97.0	2,321 fps	38,500 CUP	102.0	2,432 fps	43,300 CUP
	AR2217	.416"	3.700"	110.0	2,371 fps	37,500 CUP	116.0C	2,470 fps	42,200 CUP
416 Weatherby Magnum				Case: Weatherby Twist: 1:14" Primer: Federal 215			Barrel length: 24" Trim length: 2.903"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. BAR XFB	AR2209	.416"	3.780"	117.0	2,917 fps	-	122.0	3,051 fps	-
350 GR. BAR XFB	AR2209	.416"	3.780"	112.0	2,728 fps	-	118.0	2,891 fps	-
400 GR. HDY RN	AR2209	.416"	3.780"	105.0	2,564 fps	-	110.0	2,687 fps	-
	AR2213SC	.416"	3.780"	116.0	2,625 fps	-	120.0	2,703 fps	-
	AR2217	.416"	3.780"	116.0	2,348 fps	-	120.0	2,419 fps	-
44-40 Winchester (44-40 WCF)				Case: Winchester Twist: 1:36" Primer: Winchester LP			Barrel length: 20" Trim length: 1.295"		
WARNING: Data only for use in Winchester Model 92 & 94, Marlin Model 1894 and Remington Model 14.5 rifles in excellent condition. Either slug the bore to determine appropriate bullet diameters or use .427" bullets only. Do not use .429" bullets without first checking barrel bore size.				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. LEAD RNFP	AS30N	.428"	1.600"	4.2	845 fps	8,200 PSI	5.0	924 fps	11,700 PSI
	AP70N	.428"	1.600"	6.6	950 fps	10,000 PSI	7.3	1,069 fps	11,100 PSI
	AR2205	.428"	-	-	-	-	24.0	1,450 fps	-
215 GR. CAST	AR2205	.428"	-	-	-	-	22.0	1,380 fps	-
240 GR. Jacketed	AR2205	.428"	-	-	-	-	20.0	1,370 fps	-

RIFLE DATA

44 Remington Magnum				Case: Winchester			Barrel length: 20"		
				Twist: 1:38"			Trim length: 1.280"		
				Primer: Remington 2 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
165 GR. LRNFP CAST	AS30N	.430"	1.500"	4.4	949 fps	8,500 CUP	5.5	1,147 fps	15,500 CUP
	AP70N	.430"	1.500"	6.5	1,009 fps	7,700 CUP	7.2	1,138 fps	11,500 CUP
180 GR. HDY XTP	AR2205	.430"	1.600"	27.5	2,005 fps	24,000 CUP	29.0	2,114 fps	31,200 CUP
185 GR. LRNFP CAST	AS30N	.430"	1.540"	4.2	859 fps	8,900 CUP	6.0	1,162 fps	18,400 CUP
	AP70N	.430"	1.540"	6.4	993 fps	8,400 CUP	7.4	1,180 fps	12,600 CUP
200 GR. LRNFP CAST	AS30N	.430"	1.570"	4.2	874 fps	8,500 CUP	6.4	1,172 fps	20,200 CUP
	AP70N	.430"	1.570"	6.8	1,065 fps	10,500 CUP	7.8	1,209 fps	15,400 CUP
200 GR. NOS JHP	AR2205	.429"	1.600"	25.0	1,840 fps	29,800 CUP	27.0	1,982 fps	37,800 CUP
210 GR. SIE JHC	AR2205	.430"	1.600"	25.0	1,843 fps	29,200 CUP	27.0	1,970 fps	37,600 CUP
225 GR. SPR JHP	AR2205	.429"	1.575"	23.0	1,721 fps	27,400 CUP	25.5	1,897 fps	35,700 CUP
240 GR. LSWC CAST	AS30N	.430"	1.620"	4.3	839 fps	14,000 CUP	6.2	1,062 fps	21,800 CUP
	AP70N	.430"	1.620"	6.5	927 fps	11,700 CUP	10.2	1,374 fps	37,500 CUP
240 GR. NOS JHP	AR2205	.429"	1.600"	22.0	1,624 fps	28,400 CUP	24.0	1,778 fps	36,100 CUP
270 GR. SPR GDSP	AR2205	.429"	1.600"	20.5	1,476 fps	28,400 CUP	22.5	1,638 fps	37,400 CUP
280 GR. SFT JHP	AR2205	.430"	1.700"	20.0	1,354 fps	27,600 CUP	22.0	1,544 fps	37,800 CUP
300 GR. HDY XTP	AR2205	.430"	1.600"	18.0	1,318 fps	30,600 CUP	20.0	1,452 fps	38,600 CUP
444 Marlin				Case: Remington			Barrel length: 24"		
				Twist: 1:38"			Trim length: 2.215"		
				Primer: Remington 9 1/2					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. BAR XFB	AR2207	.429"	2.550"	46.0	2,309 fps	34,400 CUP	51.2C	2,566 fps	42,900 CUP
	AR2219	.429"	2.550"	50.0	2,139 fps	30,200 CUP	52.0C	2,206 fps	33,600 CUP
	Bench Mark 2	.429"	2.550"	50.0	2,040 fps	27,600 CUP	54.0	2,212 fps	35,800 CUP
225 GR. BAR XFB	AR2207	.429"	2.550"	42.2	2,107 fps	32,300 CUP	46.9	2,361 fps	42,300 CUP
	AR2219	.429"	2.550"	47.0	2,029 fps	33,400 CUP	50.0C	2,144 fps	37,000 CUP
	Bench Mark 2	.429"	2.550"	49.0	2,028 fps	34,500 CUP	52.0C	2,127 fps	38,100 CUP
240 GR. SIE JHP	AR2207	.430"	2.535"	44.0	2,206 fps	36,100 CUP	49.2C	2,499 fps	42,100 CUP
	AR2219	.430"	2.535"	49.5	2,049 fps	31,400 CUP	52.0C	2,185 fps	35,900 CUP
	Bench Mark 2	.430"	2.535"	51.0	2,042 fps	31,600 CUP	55.0C	2,234 fps	40,600 CUP
	AR2206H	.430"	2.535"	51.0	1,999 fps	29,600 CUP	53.0C	2,069 fps	33,100 CUP
260 GR. FA JFP	AR2207	.430"	2.550"	41.0	2,016 fps	35,600 CUP	45.5	2,194 fps	40,900 CUP
	AR2219	.430"	2.550"	47.0	1,944 fps	33,400 CUP	52.0C	2,159 fps	41,400 CUP
	AR2206H	.430"	2.550"	50.0	1,913 fps	32,700 CUP	53.0C	2,057 fps	36,800 CUP
265 GR. HDY JFP	AR2207	.430"	2.550"	42.0	2,034 fps	31,100 CUP	47.0	2,273 fps	41,100 CUP
	AR2219	.430"	2.550"	47.0	1,991 fps	33,200 CUP	52.0C	2,164 fps	38,300 CUP
	Bench Mark 2	.430"	2.550"	49.0	1,911 fps	31,000 CUP	53.0C	2,139 fps	40,700 CUP
	Bench Mark 8208	.430"	2.550"	51.0	2,030 fps	34,700 CUP	53.5C	2,135 fps	39,100 CUP
	AR2206H	.430"	2.550"	50.0	1,944 fps	29,300 CUP	53.0C	2,080 fps	34,800 CUP
270 GR. SPR JFP	AR2207	.429"	2.540"	42.0	2,092 fps	34,900 CUP	46.5	2,261 fps	41,400 CUP
	AR2219	.429"	2.540"	47.0	1,973 fps	31,700 CUP	52.0C	2,169 fps	38,100 CUP
	Bench Mark 2	.429"	2.540"	50.0	1,978 fps	33,500 CUP	54.0C	2,166 fps	41,700 CUP
	Bench Mark 8208	.430"	2.540"	51.0	2,019 fps	34,300 CUP	53.5C	2,107 fps	38,300 CUP
	AR2206H	.429"	2.540"	50.0	1,950 fps	29,300 CUP	53.0C	2,080 fps	33,400 CUP
275 GR. BAR FP	AR2207	.430"	2.520"	40.0	1,973 fps	33,500 CUP	44.5	2,172 fps	41,800 CUP

C = Compressed Load: L = Lead Projectile

RIFLE DATA

444 Marlin				Case: Remington Twist: 1:38" Primer: Remington 9 1/2			Barrel length: 24" Trim length: 2.215"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
	AR2219	.430"	2.520"	46.0	1,930 fps	33,800 CUP	51.0C	2,146 fps	43,100 CUP
	Bench Mark 2	.430"	2.520"	48.0	1,930 fps	35,900 CUP	51.0C	2,069 fps	42,300 CUP
	AR2206H	.430"	2.520"	47.0	1,780 fps	27,100 CUP	52.0C	2,021 fps	36,200 CUP
280 GR. SFT HP	AR2207	.430"	2.620"	38.0	1,938 fps	37,300 CUP	42.5	2,108 fps	42,300 CUP
	AR2219	.430"	2.620"	44.5	1,901 fps	33,400 CUP	49.5	2,120 fps	42,400 CUP
	Bench Mark 2	.430"	2.620"	46.0	1,935 fps	38,300 CUP	49.5C	2,070 fps	42,600 CUP
	Bench Mark 8208	.430"	2.620"	48.0	1,942 fps	35,900 CUP	52.0	2,099 fps	41,600 CUP
	AR2206H	.430"	2.620"	47.0	1,875 fps	30,300 CUP	52.0C	2,089 fps	37,600 CUP
	AR2208	.430"	2.620"	49.0	1,914 fps	33,000 CUP	52.0C	2,025 fps	36,800 CUP
300 GR. SFT HP	AR2207	.430"	2.620"	38.5	1,917 fps	36,200 CUP	42.5	2,082 fps	42,500 CUP
	AR2219	.430"	2.620"	43.0	1,776 fps	30,600 CUP	48.0	2,038 fps	42,600 CUP
	Bench Mark 2	.430"	2.620"	46.0	1,899 fps	36,200 CUP	48.5	1,993 fps	41,900 CUP
	Bench Mark 8208	.430"	2.620"	46.0	1,829 fps	35,700 CUP	49.0	2,029 fps	41,600 CUP
	AR2206H	.430"	2.620"	47.0	1,839 fps	33,600 CUP	50.0C	1,931 fps	35,600 CUP
	AR2208	.430"	2.620"	47.0	1,784 fps	30,700 CUP	50.0C	1,914 fps	35,700 CUP
45-70 Government (Trapdoor Rifles)				Case: Winchester Twist: 1:20" Primer: CCI 200			Barrel length: 24" Trim length: 2.100"		
WARNING: This data is intended for Springfield "Trapdoor" 1886, rolling block and antique replica rifles. Pressure limit 28,000 PSI/CUP NOTE: See Single Action Rifle section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. SIE HP	AR2207	.458"	2.525"	45.0	1,807 fps	16,700 CUP	55.0	2,221 fps	27,600 CUP
300 GR.	Bench Mark 1	-	-	46.0	1,725 fps	-	56.0	2,100 fps	-
300 GR. SIE HP	AR2219	.458"	2.525"	54.0	1,850 fps	18,100 CUP	60.0	2,142 fps	28,000 CUP
	Bench Mark 2	.458"	2.525"	59.5	1,907 fps	19,400 CUP	63.5C	2,113 fps	27,400 CUP
	Bench Mark 8208	.458"	2.525"	54.0	1,728 fps	18,800 CUP	60.0	2,023 fps	25,400 CUP
300 GR.	AR2206	-	-	58.0	1,850 fps	-	62.0C	2,030 fps	-
300 GR. SIE HP	AR2206H	.458"	2.525"	58.0	1,805 fps	16,500 CUP	62.0C	1,974 fps	21,000 CUP
	AR2208	.458"	2.525"	57.0	1,770 fps	16,300 CUP	63.0C	2,020 fps	23,800 CUP
325 GR. HDY FTX	AR2219	.458"	2.590"	36.5	1,401 fps	17,100 CUP	51.5	1,951 fps	26,000 CUP
	Bench Mark 8208	.458"	2.590"	48.5	1,618 fps	18,400 CUP	56.8C	1,936 fps	25,800 CUP
	AR2206H	.458"	2.590"	41.8	1,327 fps	13,700 CUP	53.3C	1,834 fps	23,500 CUP
400 GR.	Bench Mark 1	-	-	42.0	1,520 fps	-	46.0	1,665 fps	-
	AR2206	-	-	47.0	1,600 fps	-	52.0	1,770 fps	-

RIFLE DATA

45-70 Government (Lever Actions)				Case: Winchester Twist: 1:20" Primer: CCI 200			Barrel length: 24" Trim length: 2.100"		
WARNING: This data is intended for lever action rifles like the Marlin 1895. Pressure limit 40,000 PSI/CUP									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. SIE HP	AR2207	.458"	2.525"	55.0	2,221 fps	27,600 CUP	60.0	2,424 fps	40,000 CUP
	AR2219	.458"	2.525"	57.0	2,002 fps	21,400 CUP	63.0C	2,252 fps	32,600 CUP
	Bench Mark 8208	.458"	2.525"	60.0	2,023 fps	25,400 CUP	65.0C	2,240 fps	32,900 CUP
325 GR. HDY FTX	AR2219	.458"	2.590"	51.5	1,951 fps	26,000 CUP	59.4C	2,250 fps	37,600 CUP
350 GR. HDY JRN	AR2207	.458"	2.540"	48.5	2,036 fps	32,200 CUP	54.0	2,191 fps	39,300 CUP
	Bench Mark 2	.458"	2.540"	56.0	1,886 fps	26,900 CUP	60.0C	2,092 fps	39,300 CUP
	Bench Mark 8208	.458"	2.540"	55.0	1,930 fps	26,800 CUP	61.0C	2,152 fps	36,200 CUP
	AR2206H	.458"	2.540"	53.0	1,784 fps	21,700 CUP	59.0C	2,045 fps	32,900 CUP
	AR2208	.458"	2.540"	54.0	1,786 fps	21,800 CUP	60.0C	2,013 fps	29,500 CUP
400 GR. SPR JFP	AR2207	.458"	2.540"	46.0	1,854 fps	29,500 CUP	50.5	2,002 fps	39,400 CUP
400 GR.	Bench Mark 1	-	-	48.0	1,800 fps	-	52.0	1,950 fps	-
400 GR. SPR JFP	AR2219	.458"	2.540"	50.0	1,767 fps	23,700 CUP	55.0C	1,984 fps	39,200 CUP
	Bench Mark 2	.458"	2.540"	55.0	1,856 fps	29,600 CUP	58.5C	1,986 fps	40,000 CUP
400 GR.	AR2206	-	-	54.0	1,865 fps	-	56.0	1,935 fps	-
400 GR. SPR JFP	AR2206H	.458"	2.540"	50.0	1,614 fps	19,200 CUP	55.0C	1,859 fps	26,500 CUP
	AR2208	.458"	2.540"	50.0	1,655 fps	18,600 CUP	55.0C	1,845 fps	25,000 CUP
45-70 Government (Modern Rifles)				Case: Winchester Twist: 1:20" Primer: CCI 200			Barrel length: 24" Trim length: 2.100"		
WARNING: This data is for use in Ruger No. 1 and No. 3 single shots, Browning Model 1885 single shot and Siamese Mauser bolt action rifles. Pressure limit 50,000 PSI/CUP									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. BAR TTSX	AR2207	.458"	2.775"	53.0	2,346 fps	39,800 CUP	56.0C	2,445 fps	46,700 CUP
300 GR. SIE HP	AR2207	.458"	2.525"	59.5	2,394 fps	37,300 CUP	63.0	2,532 fps	50,000 CUP
325 GR. HDY FTX	AR2207	.458"	2.650"	52.0	2,242 fps	37,700 CUP	56.0C	2,378 fps	46,500 CUP
	AR2219	.458"	2.650"	59.4	2,250 fps	37,600 CUP	63.0C	2,375 fps	45,900 CUP
350 GR. HDY JRN	AR2207	.458"	2.540"	50.5	2,104 fps	35,100 CUP	56.0	2,300 fps	50,000 CUP
	AR2219	.458"	2.540"	52.0	1,898 fps	25,800 CUP	57.0C	2,143 fps	41,100 CUP
400 GR. SPR JFP	AR2207	.458"	2.540"	48.0	1,915 fps	31,800 CUP	53.0	2,108 fps	49,100 CUP
500 GR.	AR2206	-	-	50.0	1,665 fps	-	55.0	1,830 fps	-
WWG 457 Mag				Case: Twist: - Primer:			Barrel length: - Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. REM. JHP	AR2207	.458"	2.660"	56.7	2,296 fps	39,300 CUP	58.2	2,361 fps	43,200 CUP
	AR2219	.458"	2.660"	61.5	2,224 fps	36,400 CUP	64.0C	2,364 fps	42.5 CUP
350 GR. KODIAK	AR2207	.458"	2.660"	51.8	2,069 fps	37,200 CUP	53.8	2,172 fps	44,000 CUP
	AR2219	.458"	2.660"	58.0	2,092 fps	36,300 CUP	60.0C	2,191 fps	43,000 CUP
400 GR. BEAR CRK LD	AR2205	.458"	2.650"	-	-	-	27.0	1,422 fps	24,000 CUP
405 GR. KODIAK	AR2207	.458"	2.650"	44.0	1,818 fps	38,600 CUP	47.2	1,925 fps	43,000 CUP
	AR2219	.458"	2.650"	51.0	1,870 fps	37,200 CUP	53.2	1,975 fps	43,500 CUP

C = Compressed Load: L = Lead Projectile

RIFLE DATA

WWG 457 Mag				Case:			Barrel length: -		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
405 GR. REM JFP	AR2207	.458"	2.660"	48.8	1,926 fps	37,800 CUP	50.8	2,002 fps	43,700 CUP
	AR2219	.458"	2.660"	54.5	1,957 fps	39,900 CUP	57.0	2,045 fps	43,400 CUP
45-90 Winchester				Case:			Barrel length: 24"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR.	AR2207	-	-	-	-	-	36.5	1,500 fps	-
400 GR.	AR2207	-	-	-	-	-	30.5	1,350 fps	-
577/450 Martini Henry				Case:			Barrel length: 24"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
400 GR. LEAD	AR2207	-	-	-	-	-	37.0	1,300 fps	-
450 Nitro Express				Case:			Barrel length: 24"		
				Twist: -			Trim length: -		
				Primer:					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
500 GR.	AR2208	-	-	-	-	-	84.0	2,150 fps	-
	AR2209	-	-	-	-	-	100.0	2,150 fps	-
450 Marlin				Case: Hornady			Barrel length: 24"		
				Twist: 1:20"			Trim length: 2.090"		
				Primer: Winchester LR					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
250 GR. BAR XFN	AR2207	.458"	2.510"	51.0	2,253 fps	33,600 PSI	57.0C	2,509 fps	42,200 PSI
300 GR. NOS PART	AR2207	.458"	2.510"	48.0	2,116 fps	33,900 PSI	53.0	2,321 fps	42,200 PSI
	AR2219	.458"	2.510"	56.0	2,160 fps	32,900 PSI	59.0C	2,289 fps	37,300 PSI
350 GR. HDY JFP	AR2207	.458"	2.530"	43.0	1,939 fps	35,700 PSI	48.5	2,119 fps	42,200 PSI
	AR2219	.458"	2.530"	53.0	2,043 fps	36,500 PSI	58.0C	2,196 fps	42,300 PSI
	Bench Mark 2	.458"	2.530"	56.0	2,004 fps	33,300 PSI	59.0C	2,129 fps	38,600 PSI
400 GR. SPR JFP	AR2207	.458"	2.520"	41.0	1,872 fps	41,200 PSI	45.5	1,958 fps	42,600 PSI
	AR2219	.458"	2.520"	48.0	1,862 fps	34,800 PSI	52.5C	2,023 fps	41,900 PSI
	Bench Mark 2	.458"	2.520"	50.0	1,811 fps	33,000 PSI	55.0C	2,010 fps	42,500 PSI
	AR2206H	.458"	2.520"	51.0	1,817 fps	34,700 PSI	56.0C	1,986 fps	42,000 PSI
	AR2208	.458"	2.520"	54.0	1,803 fps	33,500 PSI	57.0C	1,910 fps	38,000 PSI

RIFLE DATA

458 Winchester Magnum				Case: Winchester Twist: 1:14" Primer: CCI 250			Barrel length: 24" Trim length: 2.490"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. MEI LFP	Trail Boss	.458"	2.885"	19.0	1,187 fps	10,800 CUP	23.0	1,282 fps	13,200 CUP
300 GR. BAR TSX	AR2207	.458"	3.200"	68.0	2,565 fps	40,300 CUP	76.0C	2,793 fps	51,300 CUP
	AR2219	.458"	3.200"	77.0	2,584 fps	41,300 CUP	83.0C	2,753 fps	50,500 CUP
	Bench Mark 2	.458"	3.200"	74.0	2,355 fps	30,600 CUP	80.0C	2,507 fps	32,600 CUP
300 GR. BAR TTSX BT	AR2207	.458"	3.300"	68.0	2,591 fps	40,900 CUP	72.5C	2,720 fps	49,100 CUP
	AR2219	.458"	3.300"	71.0	2,447 fps	36,900 CUP	75.0C	2,561 fps	41,200 CUP
350 GR. SPR SP	AR2207	.458"	3.105"	67.0	2,426 fps	44,700 CUP	72.0C	2,548 fps	51,600 CUP
	AR2219	.458"	3.105"	75.0	2,469 fps	40,900 CUP	80.0C	2,589 fps	49,400 CUP
	Bench Mark 2	.458"	3.105"	71.0	2,250 fps	33,500 CUP	79.0C	2,468 fps	42,400 CUP
	Bench Mark 8208	.458"	3.105"	74.0	2,365 fps	35,800 CUP	77.0C	2,452 fps	37,700 CUP
350 GR.	AR2206	-	-	77.0	2,425 fps	-	79.5	2,480 fps	-
350 GR. SPR SP	AR2206H	.458"	3.105"	77.0	2,419 fps	34,600 CUP	80.0C	2,496 fps	38,700 CUP
385 GR. CAST LRN	Trail Boss	.459"	3.000"	16.0	1,020 fps	12,100 CUP	19.0	1,123 fps	16,100 CUP
400 GR. SFT SP	AR2207	.458"	3.220"	61.0	2,197 fps	44,000 CUP	67.0	2,323 fps	51,000 CUP
	AR2219	.458"	3.220"	68.5	2,211 fps	36,500 CUP	76.0C	2,407 fps	51,100 CUP
	Bench Mark 2	.458"	3.220"	70.0	2,138 fps	33,500 CUP	78.0C	2,343 fps	46,600 CUP
	Bench Mark 8208	.458"	3.220"	73.0	2,269 fps	37,100 CUP	77.0C	2,362 fps	44,300 CUP
400 GR.	AR2206	-	-	72.0	2,200 fps	-	77.0C	2,345 fps	-
400 GR. SFT SP	AR2206H	.458"	3.220"	72.0	2,214 fps	33,100 CUP	77.0C	2,349 fps	42,500 CUP
	AR2208	.458"	3.220"	74.0	2,246 fps	34,500 CUP	77.0C	2,310 fps	38,800 CUP
405 GR. CAST LFP	Trail Boss	.458"	2.910"	18.0	1,040 fps	14,500 CUP	21.0	1,082 fps	17,100 CUP
450 GR. SFT SP	AR2207	.458"	3.340"	56.5	2,001 fps	44,700 CUP	60.0	2,092 fps	50,800 CUP
	AR2219	.458"	3.340"	67.0	2,139 fps	43,700 CUP	71.0C	2,220 fps	51,000 CUP
	Bench Mark 2	.458"	3.340"	70.0	2,090 fps	41,600 CUP	75.0C	2,220 fps	48,200 CUP
	Bench Mark 8208	.458"	3.340"	71.0	2,146 fps	40,800 CUP	75.0C	2,235 fps	48,300 CUP
	AR2206H	.458"	3.340"	70.0	2,108 fps	36,100 CUP	74.0C	2,205 fps	43,000 CUP
	AR2208	.458"	3.340"	70.0	2,083 fps	34,200 CUP	74.0C	2,195 fps	41,600 CUP
485 GR. MEI LFP	Trail Boss	.458"	2.925"	13.0	860 fps	15,500 CUP	19.0	962 fps	22,700 CUP
500 GR. HDY JRN	AR2207	.458"	3.310"	53.0	1,887 fps	48,700 CUP	58.5	1,987 fps	51,100 CUP
	AR2219	.458"	3.310"	62.5	1,935 fps	39,400 CUP	69.5C	2,109 fps	52,000 CUP
	Bench Mark 2	.458"	3.310"	68.0	2,017 fps	42,300 CUP	73.0C	2,123 fps	50,300 CUP
	Bench Mark 8208	.458"	3.310"	67.0	1,993 fps	39,400 CUP	73.5C	2,140 fps	49,700 CUP
500 GR.	AR2206	-	-	69.0	2,050 fps	-	73.5C	2,185 fps	-
500 GR. HDY JRN	AR2206H	.458"	3.310"	70.0	2,068 fps	42,000 CUP	74.0C	2,161 fps	50,300 CUP
	AR2208	.458"	3.310"	70.0	2,056 fps	39,400 CUP	74.0C	2,152 fps	48,100 CUP

RIFLE DATA

460 Weatherby Magnum				Case: Weatherby Twist: 1:16" Primer: Federal 215			Barrel length: 26" Trim length: 2.903"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
350 GR. HDY RN	AR2206H	.458"	3.355"	100.0	2,514 fps	-	110.0	2,760 fps	-
	AR2209	.458"	3.355"	115.0	2,595 fps	-	120.0	2,737 fps	-
	AR2213SC	.458"	3.355"	118.0	2,481 fps	-	128.0	2,678 fps	-
400 GR. BAR XFB	AR2206H	.458"	3.710"	97.0	2,404 fps	-	107.0	2,589 fps	-
	AR2209	.458"	3.710"	112.0	2,431 fps	-	118.0	2,610 fps	-
	AR2213SC	.458"	3.710"	117.0	2,434 fps	-	127.0	2,565 fps	-
500 GR. HDY RN	AR2206H	.458"	3.710"	95.0	2,314 fps	-	105.0	2,478 fps	-
	AR2209	.458"	3.710"	108.0	2,371 fps	-	115.0	2,508 fps	-
	AR2213SC	.458"	3.710"	116.0	2,386 fps	-	126.0	2,469 fps	-
600 GR. BAR RN	AR2209	.458"	3.710"	98.0	2,292 fps	-	104.0	2,439 fps	-
	AR2213SC	.458"	3.710"	110.0	2,302 fps	-	115.0	2,457 fps	-
470 Nitro Express				Case: Federal Twist: 1:20" Primer: Federal 215			Barrel length: 23.75" Trim length: 3.240"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
500 GR. WDLGH RN	Trail Boss	.475"	3.875"	-	-	-	45.5	1,257 fps	26,500 PSI
	AR2209	.475"	3.875"	95.0	2,134 fps	36,900 PSI	100.0	2,234 fps	41,700 PSI
	AR2213SC	.475"	3.875"	108.0	2,184 fps	38,000 PSI	112.0	2,247 fps	40,800 PSI
	AR2217	.475"	3.875"	118.0	2,172 fps	33,900 PSI	124.0C	2,300 fps	40,500 PSI
	AR2225	.475"	3.875"	118.0	2,088 fps	30,600 PSI	125.0C	2,202 fps	34,800 PSI
50 Alaskan				Case: Starline Twist: 1:20" Primer: CCI 200			Barrel length: 22" Trim length: 2.090"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
435 GR. LFN W/GC	AR2207	.510"	2.460"	57.0	1,912 fps	26,100 CUP	62.0	2,089 fps	35,500 CUP
	AR2219	.510"	2.460"	62.0	1,856 fps	25,500 CUP	66.0	1,994 fps	33,800 CUP
450 GR. BAR FP	AR2207	.510"	2.420"	52.0	1,772 fps	24,700 CUP	56.0	1,940 fps	35,300 CUP
	AR2219	.510"	2.420"	57.0	1,732 fps	26,200 CUP	60.5	1,876 fps	34,600 CUP
	Bench Mark 2	.510"	2.420"	59.0	1,718 fps	26,400 CUP	63.0	1,878 fps	35,100 CUP
500 GR. JFP	AR2207	.510"	2.500"	51.0	1,719 fps	28,600 CUP	55.0	1,854 fps	34,500 CUP
	AR2219	.510"	2.500"	56.0	1,674 fps	25,900 CUP	59.5	1,819 fps	33,900 CUP
525 GR. LFN W/GC	AR2207	.510"	2.520"	51.0	1,724 fps	27,300 CUP	55.0	1,852 fps	34,800 CUP
	AR2219	.510"	2.520"	56.0	1,691 fps	27,100 CUP	60.0	1,823 fps	34,200 CUP
	Bench Mark 2	.510"	2.520"	59.0	1,694 fps	25,800 CUP	63.0	1,820 fps	34,300 CUP

RIFLE DATA

500 CYRUS				Case: Dakota Arms Twist: 1:20" Primer: Federal 215M			Barrel length: 24" Trim length: 2.230"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
325 GR. BAR XPB	AR2207	.500"	2.895"	75.0	2,622 fps	47,000 CUP	80.0	2,724 fps	51,800 CUP
	AR2219	.500"	2.895"	85.0	2,607 fps	45,700 CUP	90.0C	2,722 fps	48,700 CUP
	Bench Mark 2	.500"	2.895"	86.0	2,572 fps	42,500 CUP	92.0C	2,720 fps	48,400 CUP
350 GR. SIE JHP	AR2219	.500"	2.655"	84.0	2,535 fps	45,500 CUP	90.0	2,654 fps	49,700 CUP
	Bench Mark 2	.500"	2.665"	87.0	2,539 fps	44,000 CUP	93.0C	2,653 fps	49,100 CUP
	AR2206H	.500"	2.655"	89.0	2,447 fps	39,800 CUP	95.0C	2,623 fps	46,900 CUP
400 GR. LEAD Conical w/GC	Trail Boss	.500"	2.710"	25.0	1,283 fps	28,800 CUP	30.0C	1,388 fps	34,500 CUP
400 GR. SIE JSP	AR2219	.500"	2.800"	80.4	2,317 fps	39,600 CUP	85.5	2,455 fps	46,200 CUP
	Bench Mark 2	.500"	2.800"	83.0	2,339 fps	39,800 CUP	89.0	2,501 fps	48,300 CUP
	AR2206H	.500"	2.800"	87.0	2,302 fps	37,100 CUP	93.0C	2,470 fps	43,700 CUP
	AR2208	.500"	2.800"	87.5	2,222 fps	35,300 CUP	93.0C	2,386 fps	40,500 CUP
450 GR. LSWC w/GC	Trail Boss	.501"	2.670"	23.0	1,189 fps	-	28.0C	1,275 fps	29,600 CUP
500 GR. HDY JFP MAG	AR2219	.500"	2.900"	74.3	2,111 fps	41,600 CUP	79.0	2,251 fps	52,000 CUP
	Bench Mark 2	.500"	2.900"	75.0	2,111 fps	42,800 CUP	81.5	2,250 fps	52,300 CUP
	AR2206H	.500"	2.900"	82.0	2,148 fps	40,600 CUP	87.0C	2,291 fps	49,100 CUP
	AR2208	.500"	2.900"	82.7	2,102 fps	39,100 CUP	88.0C	2,242 fps	46,500 CUP
500 Jeffery				Case: Twist: - Primer:			Barrel length: 45" Trim length: -		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
500 GR.	AR2206	-	-	-	-	-	96.0	2,300 fps	-
50 Browning Machine Gun				Case: FNB Twist: 1:16.5" Primer: CCI 35			Barrel length: 45" Trim length: 3.900"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
655 GR. ADI FMJ	AR2218	.510"	5.450"	-	-	-	248.0	3,029 fps	-
750 GR. HDY A-MAX	AR2218	.510"	5.450"	-	-	-	233.0	2,800 fps	-
800 GR. BAR SOLID	AR2218	.510"	5.630"	-	-	-	225.0	2,725 fps	-

SINGLE ACTION DATA

Introduction

Velocities for all cartridges listed are limited by the SAAMI maximum allowable pressures. Minimum loads are also established by pressure, since loads with very low pressure may fail to function in very cold weather, resulting in a bullet becoming lodged in the bore (please see the Warnings section of this guide). The average loss in velocity from the listed pressure barrel data when using a $4\frac{5}{8}$ inch barrelled revolver is 175 fps. A $7\frac{1}{2}$ inch revolver will lose approximately 50 fps. Carbines will generally develop velocities similar to those listed in the data. Some carbine/cartridge combinations will exceed the velocities listed. Because of a wide variation in bullet diameter, chamber diameter, cylinder gap, case capacity and manufacturing variations in primers and powder, we suggest that you chronograph loads from your own firearms.

DO NOT LOAD BELOW MINIMUM RECOMMENDATIONS. Doing so could result in a bullet stuck in the bore.

Long Range Rifle Data

The loads listed below are representative of common calibres used. As there are so many cartridges that could be used, only a few are shown.

DO NOT USE ANY FILLER MATERIAL WITH THESE LOADS, as fillers can alter pressure and velocities decidedly. Velocities are limited to approximately 1,600 fps due to excessive leading at higher velocities. Use flat point bullets in tubular magazines.

Shotgun

Any load suitable for trap or skeet is suitable for Single Action shooting. Shot loads of $\frac{7}{8}$ oz., 1 oz. and $1\frac{1}{8}$ oz. are all that is required. Heavier loads generate more recoil and are, at best, unpleasant to shoot and, at worst, add time to your score. The loads included in this guide were selected for their performance and for component availability.

Remember:

1. Smooth shells come out of a double-barrelled shotgun better than ribbed shells.
2. NO STEEL SHOT.
3. NO SHOT LARGER THAN #4. Size 6, $7\frac{1}{2}$ and 8 are most common.
4. CHECK YOUR RELOADS IN YOUR GUN FOR PROPER FUNCTION.

*Damascus barrels should be considered unsafe with ANY powder.



SINGLE ACTION RIFLE

25-20 Winchester				Case: Remington Twist: 1:14" Primer: Winchester SR			Barrel length: 24" Trim length: 1.320"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
71 GR. LRNFP	AR2205	.258"	1.545"	6.0	1,146 fps	13,700 CUP	7.0	1,346 fps	18,200 CUP
85 GR. LRNFP	AR2205	.258"	1.600"	6.0	1,129 fps	18,500 CUP	7.0	1,317 fps	20,500 CUP
30-30 Winchester				Case: Winchester Twist: 1:12" Primer: Winchester LR			Barrel length: 24" Trim length: 2.030"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. CAST LFN	Trail Boss	.308"	2.485"	6.5	997 fps	20,500 CUP	9.0	1,195 fps	29,100 CUP
	AR2207	.308"	2.485"	15.0	1,420 fps	15,000 CUP	17.0	1,616 fps	20,600 CUP
	AR2206H	.308"	2.485"	17.5	1,351 fps	15,200 CUP	21.0	1,562 fps	23,100 CUP
32-40 Winchester				Case: Winchester Twist: 1:16" Primer: Remington 2 1/2			Barrel length: 24" Trim length: 2.120"		
NOTE: See Single Action Rifle section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
196 GR. HOCH	Trail Boss	.324"	2.555"	5.0	833 fps	12,500 CUP	6.0	935 fps	25,300 CUP
	AR2205	.324"	2.555"	-	-	-	13.0	1,367 fps	18,000 CUP
202 GR. POPE	AR2205	.324"	2.555"	-	-	-	14.0	1,376 fps	15,900 CUP
204 GR. MILLER	AR2205	.324"	2.555"	-	-	-	13.5	1,367 fps	16,300 CUP
38-55 Winchester				Case: Winchester Twist: 1:18" Primer: CCI 200			Barrel length: 24" Trim length: 2.075"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
250 GR. LYMAN CAST	Trail Boss	.376"	2.500"	6.0	842 fps	20,300 CUP	7.0	911 fps	25,600 CUP
	AR2207	.376"	2.500"	18.5	1,408 fps	17,100 CUP	24.0	1,740 fps	26,200 CUP
	AR2219	.376"	2.500"	24.0	1,534 fps	22,500 CUP	27.0	1,692 fps	27,600 CUP
	AR2206H	.376"	2.500"	21.0	1,197 fps	18,200 CUP	26.0	1,600 fps	26,500 CUP
40-65 Winchester				Case: Winchester Twist: 1:16" Primer: Winchester LR			Barrel length: 24" Trim length: 2.095"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
400 GR. LRNFP	Trail Boss	.409"	2.780"	11.0	889 fps	20,000 CUP	12.0	915 fps	21,200 CUP
	AR2205	.409"	2.780"	20.0	1,277 fps	18,900 CUP	23.0	1,410 fps	24,900 CUP
	AR2207	.409"	2.780"	28.0	1,441 fps	21,200 CUP	31.0	1,572 fps	24,700 CUP
	AR2219	.409"	2.780"	30.5	1,398 fps	19,200 CUP	33.0	1,520 fps	23,900 CUP
	Bench Mark 2	.409"	2.780"	29.0	1,321 fps	18,800 CUP	32.5	1,491 fps	25,000 CUP
	Bench Mark 8208	.409"	2.780"	30.8	1,409 fps	24,300 CUP	32.4	1,462 fps	25,100 CUP
	AR2206H	.409"	2.780"	33.0	1,423 fps	19,700 CUP	36.0	1,554 fps	24,200 CUP
	AR2208	.409"	2.780"	35.0	1,438 fps	20,100 CUP	38.0	1,558 fps	24,800 CUP

C = Compressed Load; L = Lead Projectile

SINGLE ACTION RIFLE

45-70 Government (Trapdoor Rifles)				Case: Winchester Twist: 1:20" Primer: CCI 200			Barrel length: 24" Trim length: 2.100"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
300 GR. CAST LFP	Trail Boss	.458"	2.465"	14.0	1,199 fps	19,400 CUP	16.5	1,285 fps	20,900 CUP
	AR2207	.458"	2.465"	30.0	1,390 fps	14,400 CUP	35.5	1,641 fps	16,100 CUP
	Bench Mark 2	.458"	2.465"	54.0	1,788 fps	18,300 CUP	58.0	1,940 fps	21,900 CUP
	Bench Mark 8208	.458"	2.465"	51.2	1,723 fps	19,500 CUP	55.0	1,924 fps	24,700 CUP
	AR2206H	.458"	2.465"	45.0	1,572 fps	14,400 CUP	51.0	1,703 fps	15,500 CUP
	AR2208	.458"	2.465"	45.0	1,599 fps	17,800 CUP	55.0	1,880 fps	20,600 CUP
385 GR. CAST LFP	Trail Boss	.458"	2.505"	14.0	1,075 fps	19,400 CUP	16.0	1,142 fps	23,200 CUP
	AR2207	.458"	2.505"	28.0	1,302 fps	13,300 CUP	32.0	1,483 fps	14,700 CUP
	Bench Mark 2	.458"	2.505"	50.0	1,621 fps	16,300 CUP	53.0	1,779 fps	21,300 CUP
	AR2206H	.458"	2.505"	35.0	1,280 fps	11,900 CUP	42.0	1,526 fps	23,100 CUP
	AR2208	.458"	2.505"	42.5	1,537 fps	15,400 CUP	52.5	1,805 fps	21,800 CUP
405 GR. CAST LFP	Trail Boss	.458"	2.540"	12.0	971 fps	24,500 CUP	13.0	1,007 fps	25,600 CUP
	AR2207	.458"	2.540"	27.0	1,251 fps	14,200 CUP	31.0	1,459 fps	17,100 CUP
	Bench Mark 2	.458"	2.540"	47.0	1,564 fps	17,100 CUP	50.0	1,695 fps	22,600 CUP
	Bench Mark 8208	.458"	2.540"	47.9	1,637 fps	21,800 CUP	51.0	1,727 fps	23,600 CUP
	AR2206H	.458"	2.540"	40.0	1,424 fps	14,900 CUP	48.0	1,645 fps	18,900 CUP
	AR2208	.458"	2.540"	40.0	1,392 fps	15,600 CUP	50.0	1,718 fps	20,900 CUP
485 GR. CAST LFP	Trail Boss	.458"	2.540"	8.0	699 fps	17,100 CUP	10.0	804 fps	23,300 CUP
	AR2207	.458"	2.540"	28.0	1,279 fps	16,400 CUP	32.0	1,434 fps	20,400 CUP
	Bench Mark 2	.458"	2.540"	38.0	1,290 fps	15,600 CUP	43.0	1,503 fps	23,400 CUP
45-120 Sharps				Case: Bell Twist: 1:18" Primer: Federal 210M			Barrel length: 24" Trim length: 3.240"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
350 GR. LY #457122	Trail Boss	.458"	3.700"	29.0	1,320 fps	20,500 CUP	32.0	1,371 fps	24,400 CUP
	AR2207	.458"	3.700"	46.0	1,783 fps	22,500 CUP	49.0	1,903 fps	27,500 CUP
	AR2219	.458"	3.700"	50.0	1,717 fps	21,000 CUP	53.0	1,874 fps	27,700 CUP
	Bench Mark 2	.458"	3.700"	53.0	1,809 fps	24,700 CUP	57.0	1,922 fps	26,800 CUP
	AR2206H	.458"	3.700"	59.0	1,875 fps	24,800 CUP	64.0	2,031 fps	26,900 CUP
405 GR. LY #457193	Trail Boss	.458"	3.730"	26.0	1,156 fps	18,300 CUP	30.0	1,252 fps	25,500 CUP
	AR2207	.458"	3.730"	45.0	1,708 fps	24,700 CUP	48.0	1,818 fps	27,200 CUP
	AR2219	.458"	3.730"	49.0	1,665 fps	23,200 CUP	52.5	1,793 fps	27,900 CUP
	Bench Mark 2	.458"	3.730"	53.0	1,805 fps	26,500 CUP	58.0	1,917 fps	27,200 CUP
	AR2206H	.458"	3.730"	58.0	1,849 fps	26,000 CUP	64.0	2,012 fps	28,300 CUP
	AR2208	.458"	3.730"	59.0	1,763 fps	24,200 CUP	63.0	1,858 fps	28,200 CUP
500 GR. LY #457125	Trail Boss	.458"	3.290"	26.0	1,050 fps	20,100 CUP	29.0	1,105 fps	24,300 CUP
	AR2207	.458"	3.920"	42.0	1,523 fps	25,200 CUP	46.5	1,650 fps	28,300 CUP
	AR2219	.458"	3.920"	48.0	1,568 fps	25,400 CUP	52.0	1,695 fps	28,300 CUP
	Bench Mark 2	.458"	3.920"	50.0	1,607 fps	26,600 CUP	54.5	1,747 fps	28,200 CUP
	AR2206H	.458"	3.920"	54.0	1,641 fps	24,400 CUP	60.0	1,809 fps	28,500 CUP
	AR2208	.458"	3.920"	56.0	1,618 fps	24,200 CUP	61.0	1,737 fps	27,900 CUP

SINGLE ACTION RIFLE

50-140 Sharps				Case: Bell			Barrel length: 24"		
				Twist: 1:22"			Trim length: 3.230"		
				Primer: Federal 210M					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
425 GR. LY #515141	AR2208	.512"	3.800"	95.0	2,127 fps	23,600 CUP	102.5	2,294 fps	28,100 CUP
	AR2209	.512"	3.800"	105.0	2,033 fps	21,600 CUP	114.0	2,242 fps	26,700 CUP
	AR2213SC	.512"	3.800"	118.0	2,079 fps	22,800 CUP	125.0	2,209 fps	26,300 CUP
515 GR. LY #515142	AR2208	.512"	3.750"	87.0	1,958 fps	24,000 CUP	95.0	2,088 fps	27,900 CUP
	AR2209	.512"	3.750"	101.0	1,916 fps	22,000 CUP	108.0	2,091 fps	27,200 CUP
	AR2213SC	.512"	3.750"	112.0	1,956 fps	23,200 CUP	118.0	2,085 fps	27,500 CUP

SINGLE ACTION PISTOL

32 H&R Magnum				Case: Federal Twist: 1:16" Primer: Federal 100			Barrel length: 5" Trim length: 1.070"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. HDY LSWC	Trail Boss	.314"	1.350"	2.4	751 fps	10,700 CUP	2.8	785 fps	11,300 CUP
	AP70N	.314"	1.350"	3.0	819 fps	8,400 CUP	3.2	908 fps	11,500 CUP
32-20 Winchester				Case: Remington Twist: 1:20" Primer: Winchester SP			Barrel length: 5.5" Trim length: 1.305"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. CAST LRNFP	Trail Boss	.314"	1.490"	2.5	785 fps	11,400 CUP	2.8	830 fps	13,900 CUP
115 GR. CAST LRNFP	Trail Boss	.314"	1.580"	2.2	642 fps	11,300 CUP	2.5	707 fps	15,300 CUP
	AP70N	.314"	1.580"	3.0	808 fps	14,200 CUP	3.2	869 fps	16,000 CUP
38 Special				Case: Winchester Twist: 1:18.75" Primer: Winchester SP			Barrel length: 7.7" Trim length: 1.145"		
NOTE: See Single Action Pistol section for more loads with lead bullets.									
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. CAST LRNFP	AS30N	.359"	1.325"	2.5	705 fps	7,900 PSI	3.0	938 fps	11,400 PSI
	Trail Boss	.359"	1.325"	3.0	740 fps	7,800 PSI	5.0	904 fps	8,100 PSI
125 GR. CAST LRNFP	AS30N	.358"	1.445"	2.5	810 fps	8,400 CUP	3.5	978 fps	16,900 CUP
	Trail Boss	.358"	1.445"	3.0	753 fps	11,600 PSI	5.3	952 fps	13,400 PSI
	AP70N	.358"	1.445"	4.3	872 fps	8,700 CUP	4.7	1,036 fps	16,800 CUP
130 GR. MEI CAST LRNFP	AS30N	.358"	1.460"	3.0	828 fps	12,500 PSI	3.5	924 fps	16,100 PSI
	AP70N	.358"	1.460"	4.7	957 fps	13,500 PSI	5.2	1,056 fps	16,000 PSI
135 GR. CAST LRNFP	AS30N	.358"	1.418"	2.6	767 fps	11,400 CUP	3.3	910 fps	16,200 CUP
135 GR. LEAD WC *	AP50N	.358"	1.278"	2.8	645 fps	9,450 PSI	3.5	845 fps	16,850 PSI
135 GR. CAST LRNFP	AP70N	.358"	1.418"	4.1	924 fps	13,400 CUP	4.6	1,025 fps	16,900 CUP
158 GR. CAST LSWC	AS30N	.358"	1.475"	2.8	812 fps	12,900 CUP	3.1	871 fps	15,100 CUP
	Trail Boss	.357"	1.475"	2.7	661 fps	11,400 PSI	4.2	804 fps	13,700 PSI
158 GR. CAST LSWC *	AP50N	.358"	1.470"	3.2	660 fps	8,200 PSI	3.8	800 fps	16,600 PSI
158 GR. CAST LSWC	AP70N	.358"	1.475"	3.5	756 fps	9,600 CUP	4.5	974 fps	16,700 CUP
* 4" Vented Barrel									

SINGLE ACTION PISTOL

357 Magnum				Case: Winchester			Barrel length: 10"		
				Twist: 1:18.75"			Trim length: 1.285"		
				Primer: Winchester SPM					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
90 GR. CAST LRNFP	AS30N	.359"	1.560"	2.7	780 fps	6,000 CUP	3.5	1,106 fps	12,500 CUP
	Trail Boss	.359"	1.560"	3.5	969 fps	6,800 CUP	5.0	1,121 fps	10,700 CUP
125 GR. CAST LRNFP	AS30N	.358"	1.580"	3.5	984 fps	11,900 CUP	5.3	1,260 fps	33,000 CUP
	Trail Boss	.358"	1.580"	3.5	874 fps	14,900 CUP	5.3	1,035 fps	17,900 CUP
	AP70N	.358"	1.580"	4.8	1,046 fps	11,000 CUP	6.8	1,401 fps	34,200 CUP
135 GR. CAST LRNFP	AS30N	.358"	1.580"	3.4	914 fps	12,200 CUP	5.1	1,207 fps	30,200 CUP
135 GR. CAST LWC *	AP50N	.358"	-	4.0	870 fps	16,700 PSI	5.2	1,065 fps	31,900 PSI
135 GR. CAST LRNFP	AP70N	.358"	1.580"	4.8	986 fps	11,700 CUP	6.5	1,314 fps	27,800 CUP
158 GR. CAST LSWC	AS30N	.358"	1.610"	3.2	867 fps	14,400 CUP	4.6	1,079 fps	33,600 CUP
	Trail Boss	.357"	1.610"	3.2	754 fps	16,500 CUP	4.2	865 fps	20,400 CUP
158 GR. CAST LSWC *	AP50N	.358"	1.610"	5.0	925 fps	21,800 PSI	5.8	1,030 fps	33,000 PSI
158 GR. CAST LSWC	AP70N	.358"	1.610"	4.0	890 fps	15,700 CUP	6.2	1,247 fps	33,400 CUP
* 4" Vented Barrel									
38-40 Winchester				Case: Winchester			Barrel length: 5.5"		
				Twist: 1:36"			Trim length: 1.295"		
				Primer: Winchester LP					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
140 GR. CAST LRNFP	AS30N	.401"	1.600"	4.0	778 fps	4,900 PSI	5.0	960 fps	10,100 PSI
180 GR. CAST LRNFP	AS30N	.401"	1.600"	4.7	760 fps	8,700 PSI	5.5	889 fps	13,500 PSI
	Trail Boss	.401"	1.600"	4.5	694 fps	7,300 PSI	5.5	800 fps	9,900 PSI
	AP70N	.401"	1.600"	6.9	813 fps	8,200 PSI	7.5	955 fps	11,900 PSI
44 Russian				Case: Starline			Barrel length: 5"		
				Twist: 1:20"			Trim length: 0.960"		
				Primer: Winchester LP					
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
165 GR. LRNFP	AS30N	.430"	1.165"	3.0	776 fps	7,300 CUP	4.0	979 fps	11,100 CUP
	Trail Boss	.430"	1.165"	3.3	742 fps	7,600 CUP	4.5	878 fps	11,600 CUP
200 GR. LRNFP	AS30N	.430"	1.245"	3.2	747 fps	8,000 CUP	3.7	837 fps	11,100 CUP
	Trail Boss	.430"	1.245"	3.0	647 fps	7,900 CUP	3.9	747 fps	10,400 CUP
	AP70N	.430"	1.245"	4.8	816 fps	8,100 CUP	5.7	970 fps	11,500 CUP
240 GR. LRNFP	AS30N	.430"	1.275"	3.0	711 fps	9,400 CUP	3.5	769 fps	10,700 CUP
	Trail Boss	.430"	1.275"	3.0	604 fps	8,800 CUP	3.5	661 fps	10,000 CUP
	AP70N	.430"	1.275"	3.8	679 fps	6,400 CUP	4.6	841 fps	11,000 CUP

SINGLE ACTION PISTOL

44 S&W Special				Case: Starline Twist: 1:20" Primer: Winchester LP			Barrel length: 8" Trim length: 1.155"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
165 GR. CAST LRNFP	AS30N	.430"	1.365"	3.6	836 fps	6,000 CUP	4.6	1,009 fps	13,400 CUP
	Trail Boss	.430"	1.365"	4.8	865 fps	10,700 CUP	7.0	1,005 fps	12,100 CUP
	AP70N	.430"	1.365"	5.5	851 fps	5,700 CUP	6.3	1,042 fps	10,900 CUP
185 GR. CAST LRNFP	AS30N	.430"	1.400"	3.5	810 fps	7,800 CUP	4.2	930 fps	13,200 CUP
	Trail Boss	.430"	1.400"	4.5	791 fps	10,400 CUP	6.6	944 fps	12,600 CUP
	AP70N	.430"	1.400"	5.4	823 fps	7,700 CUP	6.4	1,031 fps	13,900 CUP
200 GR. CAST LRNFP	AS30N	.430"	1.450"	3.5	748 fps	7,800 CUP	4.5	891 fps	14,000 CUP
	Trail Boss	.430"	1.450"	4.3	757 fps	8,700 CUP	6.3	885 fps	13,200 CUP
	AP70N	.430"	1.450"	5.5	802 fps	8,200 CUP	6.5	960 fps	12,900 CUP
	AR2205	.430"	1.450"	13.0	879 fps	8,600 CUP	15.0	1,051 fps	13,100 CUP
240 GR. CAST LSWC	AS30N	.430"	1.450"	3.2	669 fps	9,000 CUP	4.0	771 fps	13,500 CUP
	Trail Boss	.430"	1.450"	4.0	673 fps	9,700 CUP	5.2	763 fps	11,700 CUP
	AP70N	.430"	1.450"	4.9	721 fps	8,000 CUP	5.6	873 fps	13,300 CUP
44-40 Winchester				Case: Winchester Twist: 1:36" Primer: Winchester LP			Barrel length: 6" Trim length: 1.295"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. CAST LFP	AS30N	.430"	1.600"	4.2	747 fps	7,400 PSI	5.5	916 fps	12,700 PSI
200 GR. CAST LRNFP	AS30N	.430"	1.600"	4.2	648 fps	8,200 PSI	5.0	765 fps	11,700 PSI
	Trail Boss	.430"	1.600"	5.5	723 fps	7,800 PSI	6.5	826 fps	11,900 PSI
	AP70N	.430"	1.600"	6.6	722 fps	10,000 PSI	7.3	777 fps	11,100 PSI
200 GR. CAST LSWC	AP50N	.428"	1.620"	5.5	755 fps	4,200 PSI	6.5	920 fps	8,900 PSI
215 GR. CAST LSWC	AP50N	.428"	1.620"	5.3	765 fps	4,450 PSI	6.4	940 fps	13,800 PSI
44 Remington Magnum				Case: Winchester Twist: 1:20" Primer: Remington 2 1/2			Barrel length: 8.275" Trim length: 1.280"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
165 GR. LRNFP CAST	AS30N	.430"	1.500"	4.4	910 fps	8,500 CUP	5.5	1,064 fps	15,500 CUP
	Trail Boss	.430"	1.500"	6.0	960 fps	17,200 PSI	8.0	1,086 fps	18,800 PSI
	AP70N	.430"	1.500"	6.5	918 fps	7,700 CUP	7.2	1,059 fps	11,500 CUP
185 GR. LRNFP CAST	AS30N	.430"	1.540"	4.2	839 fps	8,900 CUP	6.0	1,043 fps	18,400 CUP
	Trail Boss	.430"	1.540"	6.2	936 fps	19,500 PSI	7.8	1,050 fps	21,100 PSI
	AP70N	.430"	1.540"	6.4	919 fps	8,400 CUP	7.4	1,070 fps	12,600 CUP
200 GR. LRNFP CAST	AS30N	.430"	1.570"	4.2	785 fps	8,500 CUP	6.4	1,028 fps	20,200 CUP
	Trail Boss	.430"	1.570"	6.1	890 fps	17,900 PSI	7.7	988 fps	20,700 PSI
	AP70N	.430"	1.570"	6.8	897 fps	10,500 CUP	7.8	1,045 fps	15,400 CUP
230 GR. LSWC	AP50N	.430"	1.614"	5.5	835 fps	15,300 PSI	8.5	1,130 fps	32,000 PSI
240 GR. LSWC CAST	AS30N	.430"	1.620"	4.3	759 fps	14,000 CUP	6.2	940 fps	21,800 CUP
	Trail Boss	.430"	1.620"	6.0	828 fps	19,100 PSI	7.3	917 fps	21,600 PSI
	AP70N	.430"	1.620"	6.5	852 fps	11,700 CUP	10.2	1,276 fps	37,500 CUP

SINGLE ACTION PISTOL

45 S&W (Schofield)				Case: Starline Twist: 1:16" Primer: Winchester LP			Barrel length: 5" Trim length: 1.095"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
200 GR. LRNFP	AS30N	.452"	1.430"	4.0	733 fps	8,300 CUP	5.0	845 fps	13,100 CUP
	Trail Boss	.452"	1.430"	4.0	684 fps	9,000 CUP	5.0	791 fps	13,200 CUP
	AP70N	.452"	1.430"	6.0	773 fps	9,100 CUP	7.0	938 fps	13,100 CUP
230 GR. LRNFP	AS30N	.452"	1.430"	4.0	697 fps	9,400 CUP	4.7	783 fps	13,600 CUP
	Trail Boss	.452"	1.430"	4.0	649 fps	9,000 CUP	5.0	739 fps	13,000 CUP
	AP70N	.452"	1.430"	5.5	738 fps	9,400 CUP	6.0	816 fps	11,400 CUP
250 GR. LRNFP	AS30N	.452"	1.430"	4.0	674 fps	11,000 CUP	4.2	710 fps	12,500 CUP
	Trail Boss	.452"	1.430"	3.5	537 fps	7,300 CUP	4.8	685 fps	13,200 CUP
	AP70N	.452"	1.430"	6.0	724 fps	9,900 CUP	6.3	830 fps	13,800 CUP
45 Colt				Case: Winchester Twist: 1:16" Primer: Winchester LP			Barrel length: 7.26" Trim length: 1.280"		
				Start loads			Maximum loads		
Bullet	Powder	Bullet Diam.	C.O.L.	Grs.	Velocity	Pressure	Grs.	Velocity	Pressure
160 GR. CAST LRNFP	AS30N	.452"	1.500"	5.0	907 fps	7,500 CUP	6.4	1,083 fps	13,500 CUP
	Trail Boss	.452"	1.500"	7.0	903 fps	8,100 PSI	8.5	1,018 fps	10,800 PSI
	AP70N	.452"	1.500"	6.5	798 fps	7,400 CUP	9.5	1,197 fps	12,900 CUP
180 GR. CAST LRNFP	AS30N	.452"	1.540"	4.8	840 fps	7,900 CUP	6.0	1,016 fps	13,800 CUP
	Trail Boss	.452"	1.540"	6.0	818 fps	9,400 PSI	7.3	935 fps	12,700 PSI
	AP70N	.452"	1.540"	6.5	791 fps	7,100 CUP	9.2	1,161 fps	13,900 CUP
200 GR. CAST LRNFP	AS30N	.452"	1.600"	4.6	777 fps	5,900 CUP	5.9	931 fps	13,100 CUP
	Trail Boss	.452"	1.600"	5.5	706 fps	8,000 PSI	6.5	855 fps	11,000 PSI
200 GR. CAST LSWC	AP50N	.452"	1.639"	5.5	750 fps	7,600 PSI	7.0	995 fps	12,300 PSI
200 GR. CAST LRNFP	AP70N	.452"	1.600"	6.4	749 fps	5,700 CUP	8.8	1,067 fps	13,600 CUP
215 GR. CAST LRNFP	AS30N	.452"	1.650"	4.6	754 fps	6,400 CUP	5.7	889 fps	13,400 CUP
	Trail Boss	.452"	1.650"	5.5	725 fps	8,100 PSI	6.5	820 fps	10,300 PSI
	AP70N	.452"	1.650"	6.8	777 fps	6,300 CUP	8.6	1,001 fps	13,800 CUP
230 GR. CAST LRNFP	AS30N	.452"	1.580"	4.4	734 fps	7,600 CUP	5.4	865 fps	13,900 CUP
	Trail Boss	.452"	1.580"	5.5	685 fps	9,100 PSI	6.5	802 fps	12,400 PSI
	AP70N	.452"	1.580"	6.5	761 fps	7,600 CUP	8.1	975 fps	13,800 CUP
250 GR. CAST LRNFP	AS30N	.452"	1.600"	4.2	713 fps	8,500 CUP	5.1	817 fps	13,400 CUP
	Trail Boss	.452"	1.600"	4.5	606 fps	8,800 PSI	5.8	727 fps	12,700 PSI
	AP70N	.452"	1.600"	6.5	742 fps	9,200 CUP	7.8	941 fps	13,000 CUP
255 GR. CAST LSWC	AP50N	.452"	1.622"	6.0	750 fps	7,900 PSI	7.0	895 fps	11,500 PSI
	AP100	.452"	1.622"	11.0	835 fps	10,800 PSI	12.0	975 fps	16,700 PSI

SINGLE ACTION SHOTGUN

12 Gauge 2¾" Remington Premier Plastic Shells

28g (1 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AS30N	16.8	6,600 lup	1,125 fps	Rem. TGT 12	Rem. 209P
	15.7	7,100 lup	1,125 fps	WAA12SL	WIN209
	17.9	7,400 lup	1,180 fps	Rem. TGT 12	Rem. 209P
	17.0	8,200 lup	1,180 fps	WAA12SL	WIN209
	18.9	8,100 lup	1,235 fps	Rem. TGT 12	Rem. 209P
	18.4	9,500 lup	1,235 fps	WAA12SL	WIN209
	19.9	8,800 lup	1,290 fps	Rem. TGT 12	Rem. 209P
	19.8	10,700 lup	1,290 fps	WAA12SL	WIN209
AS50N	20.2	6,800 lup	1,125 fps	Rem. TGT 12	Rem. 209P
	18.4	7,100 lup	1,125 fps	WAA12SL	WIN209
	20.9	7,700 lup	1,180 fps	Rem. TGT 12	Rem. 209P
	20.1	8,600 lup	1,180 fps	WAA12SL	WIN209
	21.4	8,900 lup	1,235 fps	Rem. TGT 12	Rem. 209P
	21.0	10,000 lup	1,235 fps	WAA12SL	WIN209

12 Gauge 2¾" Remington Premier Plastic Shells

32g (1 1/8 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AS30N	16.9	6,900 lup	1,090 fps	Rem. Fig 8	Rem. 209P
	16.6	6,400 lup	1,090 fps	Windjammer	CCI209
	18.0	7,900 lup	1,145 fps	Rem. Fig 8	Rem. 209P
	18.0	7,500 lup	1,145 fps	Windjammer	CCI209
	19.2	9,000 lup	1,200 fps	Rem. Fig 8	Rem. 209P
	19.4	8,600 lup	1,200 fps	Windjammer	CCI209
AS50N	18.6	6,400 lup	1,090 fps	Rem. Fig 8	Rem. 209P
	18.3	7,000 lup	1,090 fps	WAA12	Rem. 209P
	19.2	6,100 lup	1,090 fps	Windjammer	CCI209
	19.6	7,000 lup	1,145 fps	Rem. Fig 8	Rem. 209P
	18.8	7,600 lup	1,145 fps	WAA12	Rem. 209P
	19.8	6,500 lup	1,145 fps	Windjammer	CCI209
	20.9	7,500 lup	1,200 fps	Rem. Fig 8	Rem. 209P
	19.7	8,700 lup	1,200 fps	WAA12	Rem. 209P
	21.2	7,500 lup	1,200 fps	Windjammer	CCI209
	21.7	9,100 lup	1,255 fps	Rem. Fig 8	Rem. 209P
	20.9	10,400 lup	1,255 fps	WAA12	Rem. 209P
	22.3	8,300 lup	1,255 fps	Windjammer	CCI209
AP70N	22.5	8,900 PSI	1,200 fps	Rem. Fig 8	WIN209
	21.5	9,800 PSI	1,200 fps	WAA12	WIN209
	23.2	8,400 PSI	1,200 fps	Windjammer	CCI209
	23.7	9,900 PSI	1,255 fps	Rem. Fig 8	WIN209
	23.0	10,700 PSI	1,255 fps	WAA12	WIN209
	24.4	9,100 PSI	1,255 fps	Windjammer	CCI209
	25.0	10,800 PSI	1,310 fps	Rem. Fig 8	WIN209
	25.7	10,200 PSI	1,310 fps	Windjammer	CCI209

SINGLE ACTION SHOTGUN

12 Gauge 2¾" Winchester Compression-Formed AA Type Shells

28g (1 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AS30N	17.6	6,400 lup	1,125 fps	Purple PC	Rem. 209P
	16.6	6,700 lup	1,125 fps	Rem. TGT 12	CCI209
	16.0	7,400 lup	1,125 fps	WAA12SL	WIN209
	18.6	6,800 lup	1,180 fps	Purple PC	Rem. 209P
	17.7	7,700 lup	1,180 fps	Rem. TGT 12	CCI209
	17.2	8,300 lup	1,180 fps	WAA12SL	WIN209
	19.5	7,200 lup	1,235 fps	Purple PC	Rem. 209P
	18.7	8,500 lup	1,235 fps	Rem. TGT 12	CCI209
	18.5	9,200 lup	1,235 fps	WAA12SL	WIN209
	20.5	7,600 lup	1,290 fps	Purple PC	Rem. 209P
	19.8	9,500 lup	1,290 fps	Rem. TGT 12	CCI209
	19.8	10,200 lup	1,290 fps	WAA12SL	WIN209
AS50N	20.8	5,900 lup	1,125 fps	Rem. TGT 12	Rem. 209P
	19.2	6,700 lup	1,125 fps	WAA12SL	CCI209
	18.9	6,900 lup	1,125 fps	WAA12SL	WIN209
	21.5	7,100 lup	1,180 fps	Rem. TGT 12	Rem. 209P
	20.6	7,500 lup	1,180 fps	WAA12SL	CCI209
	20.4	8,300 lup	1,180 fps	WAA12SL	WIN209
	22.3	7,800 lup	1,235 fps	Rem. TGT 12	Rem. 209P
	22.3	8,800 lup	1,235 fps	WAA12SL	CCI209
	21.3	8,900 lup	1,235 fps	WAA12SL	WIN209

12 Gauge 2¾" Winchester Compression-Formed AA Type Shells

32g (1 1/8 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AS30N	17.1	7,200 lup	1,090 fps	Red PC	Rem. 209P
	16.0	7,700 lup	1,090 fps	Rem. Fig 8	WIN209
	16.1	7,700 lup	1,090 fps	WAA12	WIN209
	18.4	7,800 lup	1,145 fps	Red PC	Rem. 209P
	17.0	8,500 lup	1,145 fps	Rem. Fig 8	WIN209
	17.3	8,800 lup	1,145 fps	WAA12	WIN209
	19.6	8,400 lup	1,200 fps	Red PC	Rem. 209P
	18.1	9,400 lup	1,200 fps	Rem. Fig 8	WIN209
	18.2	9,800 lup	1,200 fps	WAA12	WIN209
AS50N	18.3	6,800 lup	1,090 fps	Red PC	WIN209
	17.6	7,400 lup	1,090 fps	WAA12	WIN209
	18.9	7,200 lup	1,145 fps	Red PC	WIN209
	20.1	6,300 lup	1,145 fps	Rem. Fig 8	Rem. 209P
	18.1	8,300 lup	1,145 fps	WAA12	WIN209
	20.2	8,300 lup	1,200 fps	Red PC	WIN209
	21.1	7,700 lup	1,200 fps	Rem. Fig 8	Rem. 209P
	19.2	9,600 lup	1,200 fps	WAA12	WIN209
	21.3	9,700 lup	1,255 fps	Red PC	WIN209
	22.1	8,000 lup	1,255 fps	Rem. Fig 8	Rem. 209P
	21.3	10,800 lup	1,255 fps	WAA12	WIN209
AP70N	22.5	9,000 PSI	1,200 fps	Rem. Fig 8	WIN209
	22.0	10,000 PSI	1,200 fps	WAA12	WIN209
	23.5	10,000 PSI	1,255 fps	Rem. Fig 8	WIN209

SINGLE ACTION SHOTGUN

12 Gauge 2¾" Winchester Compression-Formed AA Type Shells

32g (1 1/8 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
	22.7	10,600 PSI	1,255 fps	WAA12	WIN209
	24.5	10,700 PSI	1,310 fps	Rem. Fig 8	WIN209

16 Gauge 2¾" Remington Premier SP Plastic Shells

28g (1 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AP70N	18.5	8,800 PSI	1,165 fps	Rem. SP 16	WIN209
	18.5	9,000 PSI	1,165 fps	WAA16	WIN209
	19.8	9,900 PSI	1,220 fps	Rem. SP 16	WIN209
	19.5	9,000 PSI	1,220 fps	WAA16	WIN209
	20.5	10,400 PSI	1,275 fps	Rem. SP 16	WIN209
	20.5	10,400 PSI	1,275 fps	WAA16	WIN209

16 Gauge 2¾" Winchester Compression-Formed Shells

28g (1 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AP70N	19.0	8,800 PSI	1,165 fps	ACTIV G-28	WIN209
	19.0	9,200 PSI	1,165 fps	WAA16	WIN209
	20.3	9,700 PSI	1,220 fps	ACTIV G-28	WIN209
	20.0	10,300 PSI	1,220 fps	WAA16	WIN209
	21.5	10,600 PSI	1,275 fps	ACTIV G-28	WIN209
	20.7	11,000 PSI	1,275 fps	WAA16	WIN209

20 Gauge 2¾" Remington RXP Plastic Shells

24g (7/8 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AS50N	14.0	10,700 PSI	1,200 fps	RXP20	Rem. 209P
	14.0	11,900 PSI	1,200 fps	WAA20	WIN209
AP70N	15.8	9,000 PSI	1,200 fps	RXP20	Rem. 209P
	15.8	9,600 PSI	1,200 fps	WAA20	WIN209

20 Gauge 2¾" Winchester Compression-Formed AA Type Shells

24g (7/8 oz)

Powder	Weight (grains)	Pressure	Velocity	Wad type	Primer type
AS50N	14.0	11,200 PSI	1,200 fps	PC20	WIN209
	14.0	10,800 PSI	1,200 fps	RXP20	Rem. 209P
	14.0	11,800 PSI	1,200 fps	WAA20	WIN209
AP70N	15.8	9,800 PSI	1,200 fps	RXP20	Rem. 209P
	15.5	10,200 PSI	1,200 fps	WAA20	WIN209


POWDER EQUIVALENTS

MANUFACTURERS								
ADI	Hodgdon	Alliant	IMR	Winchester	Vectan	Norma	Accurate Arms	Vihtavuori
						R-1		
		Bullseye						N310
AS30N	Clays	Red Dot			AS	N2010	NITRO 100	
Trail Boss			Trail Boss					
AP50N	HP-38	e3	PB	W231			AA 2	N320
AS50N	International	Green Dot	700X	WST			AA5	
AP70N	Universal	Unique	SR 7625					N330
		Herco		WSF	A1			
			800X	WAP			AA7	N340
AP100			SR 4756					AP100
	HS-6			W540				3N37
	HS-7	Blue Dot		W571			AA9	N350
		Steel			Ba 6			N105
		2400	SR 4759					N110
AR2205	H4227 / H110		IMR 4227	W296		R-123	AA 1680	N120
AR2207	H4198	Reloader 7	IMR 4198	W680	Tu 2000	N200		N130
Bench Mark1								N133
AR2219	H322	10-X						
Bench Mark 2	BENCHMARK		IMR 3031				AA 2015	
Bench Mark 8208			IMR 8208 XBR					
AR2206	BLC(2)				Tu 3000		AA 2230	
	N335			W748				N135
AR2206H	H4895		IMR 4895		Tu 5000		AA 2460	
AR2208	Varget		IMR 4064				AA 2520	
			IMR 4320			N201		
						N202	AA 2700	N140 / N540
	H380	Reloader 15				N203		
AR2209	H414 / H4350		IMR 4350	W760	Tu 7000	N204	AA 4350	N150 / N550
	H450	Reloader 19				N205		
			IMR 4831	WMR			AA 3100	N160 / N560
AR2217	H4831							
		Reloader 22	IMR 7828	WXR	Tu 8000	MRP		N165
AR2217	H1000							N170
AR2225	Retumbo	Reloader 25					Magpro	24N41
AR2218	H870 / H50BMG						AA 8700	20N29

NOTE:

Table shows only approximate equivalent values within about 5%. Actual burning rates can vary depending on the calibre, weapon, loading components and practices, as well as from powder lot to. As a consequence, it must be understood that Australian Munitions cannot accept any responsibility for use of this information in any way.

BURNING RATE EXAMPLES

POWDER	BURNING RATE	EXAMPLES OF APPLICATION		
		PISTOL	SHOTGUN	RIFLE
AS30N	Fastest		12 Gauge trap/skeet load	
Trail Boss		.45 Colt		45-70 Government
AP50N		.45 ACP		
AS50N			12 Gauge trap/sporting	
AP70N		40-40 Winchester	12 Gauge field load	
AP100		.38 Super Auto	20 Gauge	.22 Hornet
AR2207		.7mm TCU		.222 Remington
Bench Mark 1				.223 Remington
AR2219				6mm PPC
Bench Mark 2				.22-250 Remington
Bench Mark 8208				.204 Ruger
AR2206				.308 Winchester
AR2206H				257 Roberts
AR2208				30-30 Winchester
AR2209				30-06 Springfield
AR2213SC				300 Win. Magnum
AR2217				7mm Rem. Magnum
AR2225				300 Rem. Ultra Magnum
Ar2218	Slowest			.30/378 Weatherby

This section provides examples of applications for the ADI powders across the range of burning rates.



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The ADI Powders Handloaders' Guide is available at gun shops where ADI powders are sold.

For handloading information:

Australian Munitions will respond to written enquiries with safe and technically accurate advice.

Send your enquiries to: reload.support@adi-powders.com.au

By mail to: Reloading Enquiries, Australian Munitions, Private Bag No 1, Mulwala, New South Wales 2647, Australia or fax to: +61 (0)3 5744 1873.

Visit us at: www.adi-powders.com.au

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ADI powders are sold at major gun shops.

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